

Physical Activity Resource Guide Implementing Physical Activity Programming for SNAP-Eligible Populations

2nd Edition

About This Resource



This resource provides practical "how-to" information about physical activity programming. This guide is intended to assist public health professionals, community leaders,

community based and similar organizations assess, plan, implement and evaluate evidencebased physical education and physical activity programing in early child care, elementary school, middle school, high school, parks and the worksite environment. With this guide, you will find information on the sequential steps to successful physical activity program outcomes. This guide contains selective tools and techniques such as the Reach, Effectiveness, Adoption, Implementation, and Maintenance (RE-AIM) Model, how to write Specific, Measurable, Achievable, Realistic, Timebased (SMART) Objectives and the program

evaluation process. Each section features links to outside resources intended to support and assist in the programing planning process. This resource guide also provides information on "Evidence-based" and Supplemental Nutrition Assistance Program Education (SNAP-Ed) approved programing. However, not all of the referenced curriculums, interventions, activities and programs fully meet United States Department of Agriculture (USDA) criteria as "Evidence-based". Yet, portions of referenced curricula, interventions, activities and programs can be used to develop curricula programing than can be effective at the local level and considered by USDA as promising practice if submitted for review. Example success stories are also included to provide practical insight for successful program implementation.





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Section 1 Physical Literacy





Physical Literacy

OOSELY DEFINED, physical literacy is the ability, confidence and desire to be physically active for life (1). The goal behind physical literacy is to develop individuals who have the knowledge, skills and confidence to enjoy a lifetime of healthy physical activity (3). A physically literate person is one who has the motivation, confidence, knowledge, skills and fitness level necessary to enjoy a physically active lifestyle. A physically literate person is also committed to healthy routine movements and behaviors, including the recommended regular amount of <u>daily physical activity</u> (3). Building the confidence in individuals to participate in sports at a leisurely, recreational or competitive level is part of the goal of physical literacy.

In the book, "Physical Literacy Throughout the Life Course", Margaret Whitehead states,



"physical literacy is a lifelong process, a disposition that allows all individuals to pursue meaningful physical activity throughout their lives, regardless of physical endowment." Introducing the concept of physical literacy to children through games and drills will have the greatest impact on their lives.

When children are introduced to physical activity and taught to enjoy it, rather than compete in it, they enjoy and appreciate it throughout their lifetime. Children do not need to master specific skills if they are not sport minded. What they need is positive coaching, inspiration and encouragement in order to develop the desire to be proficient at the required skills and acquire the desire to participate in the activities that appeal to them.

Why is Physical Literacy Important?

There is plenty of available information which supports the theory that physically active children become physically active adults (4, 5, and 6). From the public health perspective, the more physically active a person is throughout their lifetime, the less risk they have of becoming obese and developing a related chronic disease such as diabetes, heart disease, or other medical condition. Not only is a physically literate child more likely to become a physically literate adult, who will be less susceptible to obesity and its related chronic diseases, they are also more likely to be self-confident adults.

Physical literacy programing develops well-rounded individuals by building positive self-esteem. According to Hastie and Wallhead, people who are making their own unique physical literacy journey, demonstrate a well-established sense of self, positive self-esteem and self-confidence (7). They also point out how a physical literate individual, through non-verbal forms of communication, is able to show insightful and sensitive interactions with others (7).

Physical Literacy in Schools and Curriculum

Seeing the unique possibilities of physical literacy, the Society of Health and Physical Educators (SHAPE) America has incorporated the concepts of physical literacy as a goal of Physical Education (P.E.) into their National Standards and grade level outcomes in P.E. for K–12 students. From a practical standpoint, the concept of physical literacy helps teachers express to their students and the general public what P.E. is trying to accomplish, while placing P.E. on a more level playing field with other subjects such as health, math, music and others (8). In the book, "The Concept of Physical Literacy", researcher Margaret Whitehead identified seven content points that should be taught in P.E. to help students become physically literate:

- A positive attitude toward physical activity by having experienced a sense of achievement and enjoyment in the subject.
- 2. The motivation and confidence to continue active participation in physical activity.
- 3. Movement competence, appropriate with their physical potential.
- 4. The experience of a range of movement activities.
- 5. Realistic self-knowledge and self-awareness enabling students to set appropriate personal goals in respect to physical activity.
- Understanding of movement and the importance of physical activity as it contributes to a physically active lifestyle.
- 7. Knowing of and how to access physical activity beyond the school.



During middle school years, grades 6–8, teachers, coaches and other instructors should stress the application of the foundational skills and knowledge to specific physical activities in recreational sports. The emphasis during the high school years is focused on lifetime physical activities, knowledge of these activities, along with their value and benefits.

In the chart below, the high school outcomes emphasize overall fitness and self-management skills to prepare students for participation in physical activities in adulthood (9). According to Whitehead, "the development of skill competency is of the highest priority to further a student's progress toward physical literacy" (9).

SHAPE NATIONAL STANDARDS FOR K-12 PHYSICAL EDUCATION WITH THE GOAL OF PHYSICAL LITERACY 2014*



Standard 1

The physically literate

of motor skills and movement patterns.

individual demonstrates

competency in a variety

Standard 2

The physically literate individual applies knowledge of concepts, principles, strategies, and tactics related to movement and performance

Standard 3 The physically literate individual demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.

Standard 4

The physically literate individual exhibits responsible personal and social behavior that respects self and others.

Standard 5

The physically literate individual recognizes the value of physical activity for health, enjoyment, challenge, self expression, and social interaction. Not included in the high school outcomes are the skills developed in "invasion games". Invasion games can be viewed as any game where the object is to attack an opponent's territory and score a goal or point. These games usually consist of teams of equal players, are fast paced, include full body contact or collisions and focus on teamwork, passion, scoring and defending (10). In the United States, invasion games would include football, soccer, hockey, water polo, team handball and other similar fast paced games.

In the U.S., invasion games are deeply rooted in our culture and included in many high school programs. While there are many applicable skills and learning opportunities that fit well with the concepts of physical literacy, Whitehead does not include invasion game skills in the high school outcomes due to their limitation as lifetime sports. A lifetime sport is a non-violent non-contact sport (golf, cycling, swimming, baseball or similar sport) individuals can participate in throughout their entire life with a lower risk of injury and less wear and tear on the body.

Incorporating Physical Literacy into Current Programing

Including the five points in PA and P.E. programing will reduce the likelihood of students disengaging from physical activity:

- 1. Create specific practice tasks related to a sport that challenge and engage youth.
- Create the greatest number of practice opportunities by placing fewer participants in more simulated games, allowing them to have more opportunities to share the ball, run, bat or other related tasks.
- 3. Spending sufficient time in practice to ensure acquisition of skills.
- 4. Separating instruction by ability group, planning for skill development and refinements and modifying a space and/or equipment.
- 5. Including a systematic assessment to track individual student learning and development (9).



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It is important to remember when applying physical literacy concepts into programing to avoid putting participants "on display" or in potential situations where they can be compared against one another. The curriculum should focus on fundamental movement skills and combinations that are applied in specific games, sports and physical activities now and later in life. The activities should minimize possible situations of social and athletic comparison among students in order not to alienate any student but to focus on individual improvement of movement and skill development.

Physical Literacy Throughout Life

Typically, people who are more physically literate will tend to be more physically active throughout their lifetime. They are better able to adapt to any physical changes with their bodies and recover from injury. However, physically literacy is not just for the athletic inclined. While we want to introduce the concept of physical literacy to individuals when they are young, physical literacy can provide many benefits to working adults and older adults as well.

There are many occupations that require an individual to be physically literate. Construction trades; plumbing, electrical and masonry; public service, police and fire; medical, nursing and paramedics; service industry, waiters and grocery clerks; agriculture and many more. These jobs require lifting, turning, bending, reaching and other agility and strength movements. For older adults, being physically literate may mean being able to go up and down stairs without falling or carrying groceries from the car into the house. When introducing physical literacy to adults consider methods using adult learning theory as a delivery technique.

In 1984 Knowles recommended four principals to be applied to adult learning (11).

- 1. Adults need to be involved in the planning and evaluation of their instruction.
- 2. Experience (including mistakes) provides the basis for the learning activities.

- 3. Adults are most interested in learning subjects that have immediate relevance and impact to their job or personal life.
- 4. Adult learning is problem-centered rather than content-oriented.

Following are four steps to incorporate the four points from Knowles into physical literacy programing for adults:

STEP 1: Assess and ask questions about the issues for your population and ask specific individuals that will be participating in the program or in your target population about issues they are experiencing or would like to improve. For many older adults, physical literacy may mean being able to complete the usual activities of daily living (ADL). These can be easy tasks such as doing the dishes, walking a pet, mowing the lawn or doing laundry. For younger adults it may require specific training in new or unusual movements to complete the needed tasks.



STEP 2: Focus on related skills. These are skills the participants were able to do at a younger age thereby having some memory of them such as riding a bicycle, swimming, gymnastics or other activity that required synchronized motor movement. It is easier for people to re-learn movements than it is to learn a new concept and new movement patterns. Relearning movement through simulated motor movements such as; bicycling with related hand-eye coordination and limb movement. Subjects could start on a stationary exercise bike and progress. If cycling is linked to walking or using a walker this can help older adults function and keep their independence. For younger adults cycling may open up related opportunities such as snowshoeing, cross country skiing or other recreational opportunities.

STEP 3: Be sure to address the specific problem the subjects or population is dealing with. Explain how they will start with what may seem like a non-related movement but will be the foundation of the sequential steps to addressing the specific issue.

STEP 4: Link the issue and the learning task(s) to the real world with problem-based learning. Using problem-based learning can be referred to as an approach that enables learners to learn in the context of a real problem. Many subjects will stress they need to be able to do___, so they can do___. This could range from having the ability to do a work related task or be able to do specific recreational activity, have a chance for a better job or live independently. Certain forms of exercise can help individuals develop or restore their physical capacity and aid in recovery following ill-health, surgery or other health condition.

Criteria

Whatever type of program you do, remember to select from the approved USAD <u>approved</u> <u>curriculum</u> or the <u>approved NEOP list</u>. If there is a best practice curriculum you would like to use and is not on the list please let your project officer know and they can review it for consideration.

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REFERENCES

- 1. The Aspen Institute: "Physical Literacy in the United States, A Model, Strategic Plan and Call to Action", Aspen Institute, Project Play Washington D.C. www.AspenInstitute.org
- Castelli, Darla M., et al., "Contextualizing physical literacy in the school environment: the challenges", Journal of Sport and Health Science (2015) www.sciencedirect.com/science/article/pii/S2095254615000332
- 3. Longmuir, P., et al., "The Canadian Assessment of Physical Literacy: methods for children in grades 4 to 6 (8 to 12 years)". Journal of Physical Activity and Health, volume 13, issue 2, Feb. 2016
- 4. Faigenbaum, Avery D., Physical activity in Children and Adolescents, American College of Sports Medicine 2015
- Smith, Lee, et at. "Association between participation in outdoor play and sport at 10 years old with physical activity in adulthood", Preventive Medicine, vol. 74 May 2015. www.sciencedirect.com/science/article/pii/S0091743515000481
- 6. 2008 Physical Activity Guidelines For Americans, Chapter 3 "Active Children and Adults" www.health.gov/paguidelines/guidelines/chapter3.aspx
- Hastie, Peter A., and Wallhead, Tristan, L., "Operationalizing physical literacy through sport education", Journal of Sport and Health Science 4 (2015) 1332–138
 www.sciencedirect.com/science/article/pii/S2095254615000253
- Battista, Rebecca A., Ph.D., FACSM, "Physical Literacy: Teaching Children the ABCs of Movement", ACSM Fit Society Page, vol. 17 no.3 October 2015, American College of Sports Medicine www.acsm.org/docs/default-source/fit-society-page/acsm-fsp-17-3.pdf?sfvrsn=0
- Roetert, Paul, E., and MacDonald, Lynn C., "Unpacking the physical literacy concept for K–12 physical education: What should we expect the learner to master?", Journal of Sport Health Science, 4 (2015) 108–112 www.sciencedirect.com/science/article/pii/S2095254615000241
- 10. Invasion Games, Get Active Sports www.getactivesports.com/school-clubs/invasion-games/
- 11. Moore, Michael and Kearsley Greg, "Distance Education, A Systems Review of Online Learning" 3rd edition 2011, Wadsworth, Belmont California
- Almond, Len, "What is the Relevance of Physical Literacy for Adults?" International Council of Sport Science and Physical Education; Bulletin No. 65 October 2013, Journal of Sports Science and Physical Education, pp 215–223 www.icsspe.org/sites/default/files/bulletin65_0.pdf

Section 2 Introduction to Physical Education and Physical Activity Programming







Introduction to Physical Education and Physical Activity Programming

EING PHYSICALLY ACTIVE is one of the most important steps that Americans of all ages can take to improve their health. Studies such as the Behavior Risk Factor Surveillance System (BRFSS) published by the Centers for Disease Control and Prevention (CDC) and the United States Department of Health and Human Services (USHHS) show that regular physical activity (PA) reduces the risk for depression, diabetes, heart disease, high blood pressure, obesity, stroke, and certain kinds of cancer. Additional information shows too many adults and youth in the U.S. do not meet current PA recommendations. According to the CDC, 51.6% of adults and 27.1% of youth say they attain the recommended amounts of moderate PA (1). Results from the California Health Interview Survey



(CHIS) indicate the problem is severe in California with 72.7% of adults in the state not meeting the CDC recommendation of being moderately physically active a minimum of five days a week for 30 minutes (2). The same study indicates 30.4% of children in California ages 6–12 meet the recommendation of being physically active for one hour a day every day of the week and 16.3% of teens (ages 13–17) meet the recommendation of being physically active for one hour a day seven days a week (3, 4).

In 2008, the United States Health and Human Services (USHHS) issued <u>The 2008 Physical Activity</u> <u>Guidelines for Americans</u>, which provides sciencebased guidance to help Americans age six years and older improve their health through appropriate PA. The Guidelines emphasize regular PA can produce health benefits over a lifetime and realizing these benefits requires PA on a regular basis (5).

Using This Resource Guide

This Physical Activity Resource Guide is designed to help public health professionals and leaders assess, plan, implement and evaluate evidence-based PA strategies and interventions leading to more active lifestyles and improved health outcomes among SNAP-Ed targeted populations. First, read the Introduction section to gain an understanding of the necessary components of a sound PA program. The introduction contains sections on building the intervention from the ground up by advising who to include in the planning process, planning techniques and tools including the RE-AIM process, how to write program objectives, creating a Logic Model to use the objectives, how to implement the program and how to measure the success of the program through evaluation. Review and use the sequential steps in planning a PA program provided in this section. The steps outlined in the introduction are the common building blocks for health programming. This Resource Guide information is divided into five sections that reflect the priority PA strategies issue by the CDC:

- 1. Early Care and Education
- 2. Physical Education and Physical Activity Programing in K–12 Schools
- 3. Physical Activity in the Community Setting: Walking Interventions
- 4. Physical Activity in the Community setting: Access to Parks and Recreational opportunities

5. Physical Activity in the Worksite

In addition, this version of the guide contains information on physical literacy, PA programing for older adults, and for disabled individuals. Each section contains links to valuable resources that contain information and examples of specific components on the PA programming process. Be aware not all resources will meet <u>USDA criteria</u> as "Best Practice" or "Evidence-based"; however they do provide insight and examples which may be useful when planning your PA program intervention.

Designing a Physical Activity Intervention

To design a sustainable and relevant PA intervention, begin by forming a group that can work collaboratively on local PA issues and goals. This group should be comprised of individuals who have an interest in promoting PA. The group should have at least one individual with some PA experience or training. Include internal partners who can bring specific skills, experiences, perspectives, beneficial relationships and resources to the table, preferably individuals who are experts or have experience in the individual components of health programming (planning, developing objectives, logic models, funding, plan writing, policy, curriculum and other components). Also, recruit community members who can help drive and support the planning and implementation of PA interventions in their homes, schools, workplaces and/or neighborhoods. These individuals should be well respected in the community and have access to key decision makers who have positions in local governing bodies or worksite environments. Members of the program target population should also be included and participate in this group. Input from target participants is crucial for local implementation process and subtleties that can make a program successful.

Sustainability and Physical Activity Programming Intervention

"Sustainability" is the capacity to maintain programming and its benefits over time. In planning the PA intervention, sustainability is the key.

To help ensure program sustainability remember to consider:

- Environmental Support
- · Funding Stability
- Communications
- Sound Program Evaluation
- Organizational Capacity
- Strategic Planning
- Program Adaptation
- Strategic Partnerships





It takes more than just money to sustain programs. Actions that effect policies, systems and environmental (PSE) change are also needed. For more information on <u>PSE programing components</u> see the evaluate section.

The Physical Activity Program Process

The *process* of developing a PA Intervention that meets the targeted population's needs includes **four steps:**

Step 1: Assess

"Assessment" is the process of collecting information in order to determine which interventions will be most effective for the specific target community or workplace and the individuals who live or work there.



Interventions should be based on the identified needs for a specific population in a particular environment. Assessing both needs and assets (resources) in a community will help gain a sense of what leaders *can and should* do, versus what they *would like* to do. The focus of an assessment can begin at the individual level, build to address group needs and expand to the entire community or work environment. The completed assessment will help determine overall program goals. Some questions to ask when assessing needs are:

- What is the main health issue?
- Who is affected and how?
- What resources do we have?
- What resources do we need?
- What information do we need?

Collecting the correct information during an assessment is vital to program success. There are two principal types of information used to determine the main issues to be addressed in program development, quantitative and qualitative. Quantitative information is about quantities or the number of times something happens. Quantitative information can be measured and expressed with numbers, rates or percentages. Some examples of quantitative data are a person's height, weight, blood pressure and the number of miles a person commutes to work or school. An example assessment item could be counting the number of minutes students are physical active in P.E. class during the week. Qualitative data is about descriptive summaries of what people think, say or do and is often subjective. A qualitative assessment item may be how the students feel when they regularly have P.E. class as opposed to when they don't have P.E. class.

 Quantitative information is: population demographics or characteristics, vital statistic records, hospital records, morbidity and mortality reports.

- Qualitative information represents: people's perceptions, attitudes, motivations and beliefs as observed through focus groups, semi-structured interviews or public meetings.
- Qualitative information can be collected by: in-depth interviews with community leaders or program planners.
- Both quantitative and qualitative information can be obtained from journals, magazines, web sites, editorial boards, online databases and other sources.

After the assessment is complete, work together with PA team members (co-workers, coalition, collaborators, partners, community or organization leaders and others) and identify what key stakeholders see as the most important concerns and then determine program priorities based on what key stakeholders view as important issues. Consider feasibility, effectiveness, and measurability when determining priorities. The data collected during the assessment phase will serve as baseline data. Baseline data is information gathered before starting a program or intervention. Baseline data is also essential in measuring the program's success, determining program goals and measuring objectives. Most importantly baseline data acts as the foundation for the planning process.

Step 2: Plan

"Planning" is the process of conceptualizing the type of programming that will be optimal for the target group or community based on the assessed needs. The RE-AIM planning process is a highly effective and one of the commonly used techniques used to identify key factors and steps to be addressed when determining the appropriate <u>best-practice</u> programing for the intended outcomes.

USING THE RE-AIM MODEL (REACH EFFECTIVENESS, ADOPTION, IMPLEMENTATION, MAINTENANCE)

A program that is effective but impractical to implement or sustain is of little value. The "RE-AIM model" helps structure program design and evaluation to answer practical questions about program implementation and sustainability. From a program planning perspective, RE-AIM can be used to focus attention to the information necessary for educators and organizations to make informed program and implementation decisions based on the degree to which a program can reach the target audience, effectively generate change and sustain the desired outcomes. RE-AIM can also be used to adopt and implemented existing programs in a variety of settings. Components of the RE-AIM model include:

- **Reach**: reaching the intended population including those at greatest risk.
 - * Who is intended to benefit from the program?
 - * How will the target population be reached?
- * Does the program reach those most in need?
- Effectiveness: the impact on nutrition, physical activity, obesity, and health.
 - * Is the program achieving the set outcomes?
- * How will the effectiveness of the program be improved?
- * How will the impact of the program be tracked and measured?
- Adoption: the ability and willingness of organizations (e.g., child care, schools, and worksites) to initiate the intervention.
 - * How will organizational support be generated?
- **Implementation:** the ability to deliver an evidencebased intervention as designed.
 - * Are program components delivered as intended?
 - * What parts of the program are flexible or adaptable without decreasing program efficiency?
- **Maintenance:** the long-term enforcement and sustainability of the intervention (6)
- * Does the program produce lasting effects (1-2 years and more)?
- * Will the organization be able to sustain the program over time? If not, what needs to be done to ensure sustainability?

See the <u>RE-AIM</u> links in the resource section for more detailed information on the RE-AIM model and the <u>Planning and Evaluation Resources section</u> for additional information on how RE-AIM can be used to evaluate a PA program. When developing your intervention, use clearly stated research goals and measurable objectives for the program. Well written goals and objectives help to establish the overall direction for and focus of a program and define what the program should achieve. There are two specific steps to writing a good goal:

- 1. Specify an expected program effect in reducing a health problem; and
- 2. Identify the target population to be affected. A program goal:
 - * Is a broad statement in a complete sentence that describes a program outcome.
 - * Gets the complete idea of your program across as simply and briefly as possible.
 - * Uses language that most people in the field outside your own agency are likely to understand.
 - * Frames the outcomes in positive terms or in terms of a decrease in health risk behaviors or health outcome.

To distinguish a goal from an objective it is important to note, a goal or goal statement is a broad, brief statement of intent. Goals provide a focus or vision for planning. Goals are non-measurable. An example goal statement is: Decrease the number of obese students in Gore Springs Elementary School using the *Fit for Life* physical education curriculum.

SMART OBJECTIVES

Once the program goal has been defined, achievable short-term and long-term outcomes should be identified. To reach short and long-term outcomes it is best to create well written objectives using the "**SMART Objective**" format.

- **Specific:** the objective is written in a precise clear manner and tells the reader what's expected, who's involved, what will be accomplished and where it will happen.
- **Measurable:** state what will be changed, by how much and when the change will occur. Change can be expressed in numbers or percentages, a learned skill, knowledge or attitude change.

- Achievable: the objective must be realistic and attainable neither out of reach nor below standard performance. An achievable objective will usually answer the question; "How will it be accomplished?"
- **Realistic:** the objective must be appropriate and related to the program at hand. The objective should be worthwhile and correspond to the other components of the program and consider the social and economic environment.
- **Time specific:** the objective is written within a specific time-frame using a target date of completion.

Example objective: *By June 2018, 80% of the 100 student participants in the Fit for Life Physical Education program at Gore Springs Elementary school, who show signs of overweight or obesity (per Body Mass Index BMI), will be able to explain the difference between moderate and vigorous physical activity and demonstrate an example of each.*

The PA work group members can design and document the plan or "roadmap" based on these SMART objectives. Sound program design allows one to attribute the successful evaluation findings to the intervention. A planning process that is often used is a Logic Model. Logic Models are useful tools in designing the program "road map" and are useful in measuring program success. Logic models can be used to deliver program content in a concentrated or narrow scope such as the use of a specific curriculum or activity while the RE-AIM process is broad perspective planning.

CHOOSING A PA CURRICULUM FOR THE IDENTIFIED PROGRAM NEEDS

Curricula that have been determined to meet <u>USDA criteria for Best Practice</u> classification have been through a peer review and evaluation process that shows effective outcomes in specific target populations. Best practice strategies:

- Are reviewed by experts in the public health field using predetermined standards.
- Are replicable and produce desirable results in a variety of settings.
- Clearly link positive effects to the program/practice being evaluated and not to other external factors.

The USDA has identified three levels of best-practice curriculum and programing for SNAP-Ed recipients:

1. Evidence–Based Research Tested

This approach is based upon relevant rigorous public health research including systematically reviewed scientific evidence, and other published studies and evaluation reports that demonstrate significant effects on individual behaviors, PA environments or policies across multiple populations, settings, or locales.

2. Practice-Based/Practice Tested

This approach is based on published or unpublished evaluation reports and case studies by practitioners working in the field with programs that have shown positive effects on individual behaviors, PA environments or policies. 3. Emerging/Newly developed intervention/ curriculum

This approach includes community or practitionerdriven activities that have the potential for obesity prevention, but have not yet been formally evaluated with a recognized scientific method and replicated results.

An evidence-based approach may include a mix of strategies, curricula and program interventions. The USDA has identified specific criteria for curricula to be used in SNAP-Ed programming. These criteria can be used to evaluated curricula content and compare to USDA requirements found in

<u>Appendix E</u>. Best-Practice programing interventions can be found in the <u>SNAP-Ed Strategies and Interventions:</u> <u>An Obesity Prevention Toolkit for States</u>.



LOGIC MODELS

Logic models are highly useful visual tools for planning, describing, managing, communicating, and evaluating a program or intervention. While the <u>RE-AIM</u> process can be used to plan out the PA program in a large scope, the Logic Model is used to outline the detailed sequence of steps that will generate the desired changes in the target population. Logic models graphically represent the program activities and the intended short-term and long-term outcomes as well as the overall program goal. A well written logic model will include; the current situation or status of the stated problem, resources available to address the problem, barriers to program success, and specific activities or objectives to address the problem as well as desired outcomes. Logic models can be created for an entire plan and/or for a single objective in the plan.

Example Logic Format								
Inputs/ Resources	Activities	Short-Term Outcomes	Intermediate Outcomes	Program Goals/ Long-Term Outcomes				
Certain resources needed to operate the program: • Selected Curriculum • Activity times/ dates/frequency • Activity equipment required • Venue • Number of available trained staff	With access to resources (example curriculum) used to accomplish planned activities 1, 2, 3, and 4 inclusive of evaluation method	Outcomes from curriculum actives may address an increase in: • Knowledge • Specific skills • Participants attitude • Participants behaviors	Additional knowledge leads to positive measurable change in participants. • Attitudes • Skills • Behaviors practiced by participants	Decrease of specific signs, behaviors in a population that lead to heath issue(s) and increase in positive skills and behaviors that lead to decreasing the level of the identified problem(s).				
External Factors: Current situation, aspects external to the program that may positively or negatively affect/influence the intended program.			Assumptions: Beliefs about people involved, levels of participation, available resources, how the program will work and related thoughts.					

More information and additional examples on logic models can be found at:

- CDC website www.cdc.gov/oralhealth/state_programs/pdf/logic_models.pdf
- Kellogg Foundation site <u>www.wkkf.org/resource-directory</u>

EXAMPLE: USING A LOGIC MODEL IN A CURRICULUM

Implementing lesson one objective one of the "P.E. in Your School" Physical Education Curriculum at Acorn Elementary School using a logic model format

Lesson one: Basics of Physical Education activities

Goal: Increased understanding of the benefits of physical activity among participants in the Acorn Elementary

School Physical Education program: P.E. in Your School.

Objective one: At the end of the session participants will be able to:

- Describe the importance of regular physical activity.
- Explain and define "Aerobic" and "Anaerobic" exercises.
- Demonstrate at least one of each "Aerobic" and "Anaerobic" exercises.
- Draft a weekly schedule that includes 60 minutes of daily physical activity.
- Complete 60 minutes of daily physical activity and record activities for one week.



Example Logic Format								
Inputs/ Resources (In order to accomplish our stated activities we will need the following)	Activities (In order to address our problem we will accomplish the following activities)	Short-Term Outcomes (Expected changes to occur after the activity)	Intermediate Outcomes (Longer term changes as a result of the activities)	Program Goals/ Long-Term Outcomes (The expected changes over an extended time)				
 Resources needed to operate the program: Location on campus Curriculum Equipment P.E. Instructor Participation from staff and support from stakeholders Support from parents Ongoing support 	 Complete lesson one of "P.E. in Your School" curriculum that emphasizes: Relevance of being physically active on a regular basis Understanding Aerobic and Anaerobic PA Planning recommended time of PA into a daily schedule Demonstrate and express one or more examples of each Aerobic and Anaerobic activities 	 Outcomes from curriculum actives: Increase in knowledge of the value of regular PA Increase in knowledge of aerobic and anaerobic PA Increase in skill of each aerobic and anaerobic PA Ability to develop and complete planned activities on a daily basis 	Outcome effects from the curriculum activities: 1. Increase in knowledge and or positive attitude regarding physical activity 2. Increase in frequency of preforming recommended frequency of aerobic and anaerobic activities 3. Increase of selected PA skills	 Decrease in sedentary behaviors in population that lead to overweight: 1. Increase regular physical activity by students 2. Decrease in sedentary behavior 3. Decrease in population BMI 4. Increase in students' academic performance 				
External Factors: 1 day activities as a ma 2) Program is suppor have difficulty implem education teacher; 4) 5) Increase funding fr) PA will be incorporated andatory Physical educa ted by school Principal; nenting program prior to Teachers will require tra om the school district w	Assumptions: 1) Survey indicates staff to be on-board with P.E. program; 2) Any inconvenience to teachers will be temporary and tolerated; 3) Incentive to teachers will help teachers review curriculum, attend training and launch program.						

Planning and evaluation go hand in hand. Planning the program starts with identifying the primary changes to be made in an institution or community. Once the goals are in place it is important to collect baseline data to document the current status of the environment or policies to be changed, and the level of community and institutional support and readiness for change. Then, as changes are made, those changes can be tracked and recorded over time. Documenting changes to an individuals' physical activity behaviors that will prevent overweight or obesity is also valuable. Changes that take place over time can be observed at the individual, interpersonal, environmental, and systems levels (Social Ecological Model). When monitoring program outcomes and progress (process evaluation), choosing the right outcome measures from the stated objectives in the logic model to assess is important as it provides information on the program implementation process and how well the information is being received by the participants at the Individual and Interpersonal levels. If the PA program includes environmental or systems change milestones, progress can be observed and documented by the actual degree of physical changes in the environment and new or changed policies that will lead to changed behaviors (examples are from the Social Ecological Model).

Individual: increase in knowledge, change in an individual's attitude or personal beliefs, and adoption of new behaviors.

Interpersonal: changes in social support system (family and friends), that support and encourage the adoption of new behaviors.

Environmental: changes in physical characteristics that support new behaviors. Systems: formal and informal rules, regulations and policy supporting the implemented changes and program.

PHYSICAL ACTIVITY AND POLICIES, SYSTEMS AND ENVIRONMENTAL CHANGE (PSE)

A PA policy is a written document, which includes a statement of intent about how an organization proposes to address PA. A policy offers the opportunity for leaders to demonstrate a formal commitment to the health of its constituents, public or private. It will outline PA goals with clear direction and methods for achieving the goals and offer a structured and coordinated approach to improving the PA status of school students, community members or workforce. A PA policy will be complementary to any existing policies within the organization such as tobacco or alcohol use.

Policy focused on PA makes a very positive statement about the value an organization places on the health and well-being of its students, employees or general population. Adopting a PA policy is a very practical way of improving employee morale in the work place, increasing use of recreation facilities in public places and establishing required PA time in public schools (7).

Why PSE?

For years, PA initiatives have focused on individual behavioral change. A different approach to advocating and creating change is through policies, systems and environmental (PSE) changes. Programs that have a profound impact on individual health behavior include methods and or techniques which make the healthy choice the easy choice. Creating policies that support an environment which promotes healthy behaviors exposes an entire selected population to healthier options.

PSE EXAMPLES

Policy: Adopting a written statement of intent supported at all levels of an organization:

- Staff will have an opportunity to stretch periodically during working hours or walk while meeting.
- Acorn Elementary school students will receive 30 minutes of Physical Education instruction and have 30 minutes of moderate Physical Education activity every school day

Systems: offering annual health programs:

- Acme Glass will conduct an employee health fair with health risk assessments and screenings for employees. This allows for employees to get a baseline on their personal health and reaffirm or make healthy lifestyle changes.
- Acorn Elementary will conduct one sports assembly each semester featuring a local professional athlete and inspire students to be more physically active at home and after school.

Environmental Change: changing the local environment to make PA more assessable

- Acme Glass management makes healthy vending machines available for employees who want healthy snacks.
- Acorn Elementary adds bike racks so students who want to ride their bicycles to school find it an easy option.

THE PHYSICAL ACTIVITY PLANNING WORKSHEET

The *Physical Activity Planning Worksheet*, found in Appendix A, is a user-friendly tool designed to assist local health department (LHD) professionals, school administrators, community leaders and worksite leaders through the process of planning a sustainable physical activity intervention with; assembling a PA Health or Wellness Team, framing SMART objectives, assigning tasks and corresponding time lines. While examples used in this resource focus on SNAP-Ed specific populations or environments, these principles apply across the board. Following the assessment, planning, implementation and evaluation processes will yield program results that make a positive difference in communities, schools, the workplace and other sectors (8). Click on the link to see the example <u>Physical Activity Planning Worksheet</u>.

Step 3: Implement

PA program implementation depends in large part on the program the team has planned. Use the RE-AIM process to develop the plan. To implement the program, follow the logic model roadmap. Employ <u>best practice</u> methods for rolling out every stage of the plan using the methodologies designed using the <u>RE-AIM</u> and <u>logic model</u> processes. The Physical Activity Planning Worksheet will help walk the team through the implementation process (see Resources: <u>Physical Activity Planning Worksheet</u>).

When developing an implementation plan be sure to include:

- The tasks required to roll out the program
- The person or people responsible for completing each task and
- The timeline for completion of each task/phase.



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Step 4: Evaluate

Evaluation is key to demonstrating program success! Evaluation involves assessing the program to inform planning and documenting the results. Use existing evaluation tools (see Program <u>Planning and</u> <u>Evaluation resources</u>), observation and anecdotal information to document your progress. Evaluating a program on an ongoing basis builds sustainability and capacity in two key ways:

- First, it helps keep the program on track with its goal(s) and outcomes. If evaluation data show an activity or strategy isn't working, the team can correct the program's course to become more effective. Evaluation or performance improvement measures can also influence strategic planning.
- 2. Second, collecting data about the program's successes and impact is a powerful tool for gaining support and funding. If the evaluation data show the program is making an important (or irreplaceable) impact, the team can make a strong case for why the program should continue. Even in times of decreased funding, evaluation and monitoring data are important for the pursuit of new funding sources.

There are three types of evaluation to consider when developing an evaluation component for a health program; process evaluation, outcome evaluation and impact evaluation.

- Process evaluation: looks at the overall project progression at key points or indicated milestones to determine if the program is on course. It can be used to determine if adjustments are needed or whether to stop or continue the program. There can be overlap with the three types of evaluation when using the <u>RE-AIM</u> method. Process evaluation can be used with the reach (exposure of the program to the target population), effectiveness (positive and negative effects of the program), adoption (number of participants in the program and attrition if any), and implementation (is the program being delivered as intended?).
- 2. **Outcome evaluation:** measures the actual change that has occurred as a result of a program. An outcome evaluation provides

information such as how many of the participants demonstrated an increase in knowledge, changed behaviors, or developed and used new skills. Most importantly, were the outcomes of the program the desired outcomes? If not, what will need to be changed to ensure the desired outcomes are obtained? Were there any negative consequences of the program? If so, what needs to be done to ensure they are not repeated?

3. **Impact evaluation:** considers the outcomes of the program and looks at how they affect the participants/target population on a broad scale and over a long-term basis. Are the desired outcomes sustainable over time, if not what will need to be done to ensure they are?

Elements of a Sound Evaluation:

- 1. Provide practical information that is useful for decision making, such as whether to keep, expand, modify, or drop a program.
- 2. Are planned at the outset of the program or as early as possible in the process.
- 3. Provide timely information for decision-making.
- Include outcome data that is closely tied to the program and measures outcomes that are realistic given the written objectives.
- Measure characteristics that are associated with the practical implementation of the program (process evaluation) not just the program outcomes.
- 6. Use validated data collection instruments or conducts formative research when developing new data collection tools for the intervention.
- 7. Predetermine the sample size needed to measure the expected effect(s) of the intervention and is informed by or builds on previous research.
- 8. Makes use, when possible, of multiple data sources such as surveys, interviews, observations, and administrative data, if available.

It is important to determine costs for evaluation and evaluation expertise.

Some experts recommend spending 7–10% of the program budget on evaluation. There are evaluation experts with experience in community-based

evaluation programs like SNAP-Ed in most states who can help evaluate SNAP-Ed interventions. Also consider other resources such as, State University extension services, local college and university staff, local nonprofit agencies and California Department of Public Health SNAP-Ed staff. CDC Prevention Research Centers are well positioned to assist with community-based evaluation for programs like SNAP-Ed. Please see "Selecting an <u>evaluation consultant</u>" in Program Planning and Evaluation Resources.

Using Evaluation as a Tool

- Collect practical baseline evaluation data that will help the team make informed and timely decisions about interventions. Select realistic outcomes: don't expect too much and measure at the appropriate points in the implementation process.
- Plan and implement the evaluation at the onset or as early in the program as possible and identify a skilled evaluator to assist in the process.
- Give evaluation the same importance as all other aspects of the program...it will serve the organization well (9).

Summary

STEP 1: ASSESS

Collect all relevant information on the specific population and the issue(s) to be addressed in the proposed PA program. The assessment should include information that identifies the needs of specific population in a specific environment. Assessing both needs and assets (resources) will help in program planning and implementation. Remember to collect both quantitative and qualitative information to develop an implementation plan; see the <u>Assess</u> section for additional information.

STEP 2: PLAN

Using the Physical Activity Planning Worksheet

In planning PA interventions, forming a workgroup of stakeholders that can work collaboratively on PA issues and goals is the key. Individuals inside and outside of the immediate organization as well as target population representatives should participate in the workgroup. The entire PA Planning worksheet is located in <u>Appendix A</u>. The following example is broken into sections for demonstration purposes.



Physical Activity Workgroup						
Name	Title	Organization	Contact Information			
Jill Smith	Assistant Principal	Acorn Elementary School	Jsmith@AES.com			
Bill Drake	6th Grade P.E. Teacher	Acorn Elementary School	Bdrake@AES.com			
Mrs. Jones	Parent	Acorn Elementary School, PTA Member	Mjones@parent.com			
Amy Nance	5th Grade Student	Acorn Elementary School, Student	AN@student.com			

In the example below, assess and describe the PA challenge, concern or symptom. Make sure to include the population that will be addressed in the intervention:

Example: After reviewing the Physical Fitness Testing scores, the Physical Activity Workgroup found that 67.5% of 5th graders at Acorn Elementary School were not in the Healthy Fitness Zone for aerobic capacity.

State a program goal. Work with the group to plan your intervention. How are you going to address this challenge, concern, or symptom? Describe your PA program or intervention in your own words.

Example: Program Goal: 5th graders at Acorn Elementary School will place in the "Healthy Fitness Zone" for aerobic capacity after participating in *P.E.* (3) and PA activities from the Fit for Life program.

Example: Program Plan: We will provide intensive teacher training and resources to increase P.E. (3)/PA practices and opportunities (i.e., curriculum, physical activity equipment and allocated time), as well as ensure these efforts are sustained through the local school wellness policy committee at Acorn Elementary School.

What specific results or outcomes are you seeking? Review the <u>RE-AIM</u> process to outline a plan. State your <u>SMART objectives</u> for your intervention. Develop a <u>logic model</u> for the process to use as a road map to implement the program.

Example: Objective: 1) At the end of the Fit for Life Instructor Training, each teacher who completes the Instructor Training at Acorn Elementary School will be able to fully demonstrate the skills necessary to implement each component of the Fit for Life curriculum for 5th grade students; 2) By September 30, 20__, every student at Acorn Elementary school will receive 200 minutes of vigorous P.E. instruction and be able to perform vigorous activities during school days (see How to Write <u>SMART Objectives</u>) on an ongoing basis.

STEP 3: IMPLEMENT

Identify the tasks required, personnel responsible for completing tasks, and the timeline for completion. Insert the completed tasks into the <u>logic model</u> activities section or use the table below as a guide.

Tasks						
What needs to be done?	Who will do it?	When must the task be completed?				
Example: Train teachers using approved NEOPB PA Resources	LHD Program Coordinator	January 25, 20				

STEP 4: EVALUATE

How will you monitor and evaluate your efforts? Work within the group to **establish checkpoints** to determine if the stated goals are being met (process evaluation). It is very important that you include evaluation measures during the planning stage, as well as monitor success throughout the intervention. Sometimes it is necessary to revisit methodologies to ensure you are using the most effective approaches to best serve the target population.

Evaluation Check Points							
What needs to be done?	How will it be done?	Who will do it?	How often? (e.g., monthly, quarterly, annually)	Who will you report your results to?			
Example: survey teachers practices on P.E. and PA instruction	use online PASS tool (see school instruction)	LHD staff will distribute to teachers	Before and after intervention	School Wellness Policy Committee, staff and School Board			

Planning and Evaluation Resources

Needs Assessments: Getting to Know Your Audiences Better

This site provides information on conducting a Needs Assessment and tailoring it for a specific population. <u>www.cancercontrol.cancer.</u> <u>gov/use_what_works/mod2/start.htm</u>

Western Region's Outcome Framework (USDA)

This site provides outcome indicators that align with the Supplemental Nutrition and Assistance Program Education (SNAP-Ed) guiding principles of SNAP-Ed. These approaches include individual, family, and group-based nutrition education, physical activity and health promotion. https://snaped.fns.usda.gov/materials/reportingsnap-ed-priority-outcome-indicators-westernregions-snap-ed-evaluation-framework

• Center Training and Research Translation (TRT) strategies and interventions

This site provides a frame-work for evaluation based on three principles. Evaluations will (1) address the entire intervention/policy planning process over time; (2) be guided by a program theory that takes a systems approach to addressing interactions across contexts, processes, outputs, and outcomes, and (3) not address the entire process at once, but rather focus evaluation on factors relevant to the current stage of the planning process. www.centertrt.org/

• The Guide to Community Preventive Services (Community Guide), Physical Activity planning principles and best practices

This guide provides information on program planning based on; 1) behavioral and social approaches, 2) campaigns and informational approaches and 3) environmental and policy approaches. <u>www.thecommunityguide.org/</u>

 The RE-AIM Model National Cancer Institute and Virginia Tech

This site provides a power-point on the RE-AIM process and impact evaluation www.ncoa.org/resources/re-aim-issue-brief/

Developing a Logic Model

This site provides practical assistance in developing a logic model. It explains the underlying principles of the logic model and its uses to enhance program planning, implementation and evaluation. www.wkkf.org/

 SNAP—Ed Strategies and Interventions (USDA)

This toolkit identifies evidence-based and emerging policy systems and environmental change strategies to help reach low-income households that are most impacted by health disparities. www.bttop.org/sites/default/files/ public/W.K.%20Kellogg%20LogicModel.pdf



Program Planning

This site explains the evaluation process and the importance of program evaluation. It also provides useful tips and hints for evaluating a program. www.sustaintool.org

- Formative vs. Process Evaluation This site provides a useful step-by-step process for developing a formative program evaluation. www.centertrt.org/content/docs/Evaluation Materials/Evaluation Framework Questions.pdf
- The National Cancer Institute's Research **Tested Intervention Programs**

This site proves a catalog of Research-Tested programs. Keep in mind "Research-Tested" may not equate to a "Best-Practice" program. www.rtips.cancer.gov/rtips/index.do

 Selecting an Evaluation Consultant This issue brief from the CDC provides information on how to identify a qualified evaluation consultant. www.cdc.gov/healthyyouth/ evaluation/pdf/brief1.pdf

Writing SMART Objectives

This issue brief from the CDC describes the criteria for writing program objectives in the SMART (Specific, Measurable, Achievable, Realistic and Time-based) format.www.cdc.gov/healthyyouth/ evaluation/pdf/brief3b.pdf

 Physical Activity Evaluation Handbook This handbook provides tools for state agencies, local agencies and community-based organizations that are evaluating physical activity programs using the following principals: 1) engage stakeholders, 2) describe the program, 3) focus of the evaluation, 4) gather credible evidence, 5) justify conclusions and 6) ensure use and share lessons learned.

www.cdc.gov/nccdphp/dnpa/physical/handbook/ pdf/handbook.pdf

Free Physical Activity Resources

Not all of the resources listed below will meet USDA requirements as Best Practice. Activities in these resources can be adapted to fit the needs of many programs.

North Carolina ENERGIZERS

Energizers are classroom-based physical activities that integrate physical activity with academic concepts. These are short (about 10 minute) activities that teachers can use to incorporate PA into the classroom. www.eatsmartmovemorenc.com/School.html

Bam! Body and Mind

This website is geared for kids and features a physical activity section that includes free activity cards explaining a variety of sports and games. www.cdc.gov/bam/

· CANFIT (California Adolescent Nutrition and Fitness Program)

The CANFIT Program's mission is to engage communities and build their capacity to improve the nutrition and physical activity status of California's low-income African American, American Indian, Latino, Asian American, and Pacific Islander youth 10–14 years old. Free nutrition and physical activity resources are downloadable. www.canfit.org

Disney Try It! Activities

This site promotes a youth fitness initiative that empowers kids ages 7 to 12 to get fit and remain physically active. Try It! encourages youth to develop games that can be played with traditional and non-traditional materials, and in a wide range of settings. This site features kid-created games and innovative low-cost equipment ideas. It also provides information on conventional activities such as stretching, yoga and jump rope. Information can be downloaded for free.

www.citizenship.disnev.com/trv-it/activities

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• P.E. Central

P.E. Central has an extensive database of physical activity lessons and games. The ability to search activities by age group and type makes the site particularly useful. www.pecentral.org/

 SPARK (Sports, Play and Active Recreation for Kids)

SPARK features Evidence Based and Best Practices physical education curricula for all ages. <u>www.sparkpe.org/physical-</u> <u>education/lesson-plans/</u>

Sports4Kids

The Sports4Kids Community Training Program provides customized staff trainings to schools, after school programs, summer camps, recreation centers, and various other youth service organizations.

www.afterschoolnetwork.org/report/organizedsports-and-health-children-and-youth

VERB—Youth Media Campaign

This Web site from the CDC includes resources and information that promotes regular physical activity as "cool" and "fun" for tweens. The website includes teen and parent pages in addition to downloadable materials. www.cdc.gov/youthcampaign/marketing/adult/ index.htm

- Get Up and Do Something This website highlights hundreds of tips on how to "Get Up and Do Something" physically active. www.getupanddosomething.org/
- Make a Difference At Your School
 A resource to programing strategies for
 programing to prevent obesity among youth.
 www.cdc.gov/healthyyouth/keystrategies/pdf/
 make-a-difference.pdf


END NOTES:

- Centers for Disease Control and Prevention. State Indicator Report on Physical Activity, 2014 Atlanta, GA Department of Health and Human Services www.cdc.gov/physicalactivity/downloads/pa_state_indicator_report_2014.pdf
- UCLA Center for Health Policy Research. Ask CHIS: Number of days physically active at least one hour adult 2009.
 www.healthpolicy.ucla.edu/Pages/home.aspx
- 3. UCLA Center for Health Policy Research. Ask CHIS: Number of days physically active at least one hour children 2011-2012. <u>www.healthpolicy.ucla.edu/Pages/home.aspx</u>
- 4. UCLA Center for Health Policy Research. Ask CHIS: Number of days physically active at least one hour teens. <u>www.healthpolicy.ucla.edu/Pages/home.aspx</u>
- U.S. Department of Health and Human Services. 2008 Physical Activity Guidelines for Americans: United States Department of Health and Human Services <u>www.health.gov/paguidelines/pdf/paguide.pdf</u>
- 6. Brown, David R., Gregory Heath, and Sarah Levin Martin., *"Promoting Physical Activity: A Guide for Community Action.* Champaign, IL: Human Kinetics, 2010. Print. 7:137-151.
- Kohl, Harold W., and Tinker Dan Murray. *Foundations of Physical Activity and Public Health*. (Champaign, IL: Human Kinetics, 2012). Print.15: 240–253
- 8. Brown, David R., Gregory Heath, and Sarah Levin. Martin. *Promoting Physical Activity: A Guide for Community Action*. (Champaign, IL: Human Kinetics, 2010). Print. 5:93-115

OTHER REFERENCES

- Fink, Arlene, "Evaluation Fundamentals", University of California Los Angeles, Langley Research Institute, Sage Publications 2015
- 2. Kohl, Harold W., and Tinker Dan Murray. *Foundations of Physical Activity and Public Health*. (Champaign, IL: Human Kinetics, 2012)
- U.S. Department of Health and Human Services, 2002 Physical Activity Evaluation Handbook. Atlanta, GA: US Department of Health and Human Services, Center for Disease Control and Prevention. <u>www.cdc.gov/nccdphp/dnpa/physical/handbook/pdf/handbook.pdf</u>
- U.S. Department of Health and Human Services, Physical Activity Guidelines for Adults: 1600 Clifton Rd., Atlanta GA June 4, 2015 www.cdc.gov/physicalactivity/everyone/guidelines/adults.html
- 5. U.S. Department of Health and Human Services, Benefits of Physical Activity: 1600 Clifton Rd., Atlanta GA June 4, 2015 <u>www.cdc.gov/physicalactivity/everyone/health/index.html</u>
- U.S. Department of Health and Human Services, Adding Physical Activity to Your Life: 1600 Clifton Rd., Atlanta GA December 1, 2011 www.cdc.gov/physicalactivity/everyone/getactive/index.html



Section 3 Physical Education and Physical Activity in Early Care and Education Settings







Physical Education and Physical Activity in Early Care and Education Settings

ARLY CARE AND EDUCATION (ECE) settings such as, child care centers, family child care homes and preschools are ideal venues for engaging young children in PA because the children in these settings are often there on a daily basis for several hours at a time and in many cases for full days. Additionally, it is during the early years, from birth to age five, when many future habits are developed, including nutrition and PA habits. Beyond the numerous health benefits for this age, PA provides social benefits by developing communication and interpersonal skills. Physical activity also enhances learning by developing fine and gross motor skills. This is also an excellent time to introduce the concepts of physical literacy.



Physical Activity Program Design in ECE Settings

As with PA planning in other sectors, creating effective PA programs in ECE first involves identifying and recruiting Health Champions and PA team members such as child care providers, preschool teachers, center directors, parents, and other adults participating in ECE settings. Champions should follow the four essential steps outlined in the introduction: **Assess, Plan, Implement, and Evaluate** (see Section 2: <u>Designing a Physical Activity</u> Intervention for a complete description).

Step 1: Assess

The first step when working to enhance the quality and quantity of PA in the ECE setting is to assess the current needs, practices, resources, knowledge, attitudes, and environment of the child care provider. It is ideal to have all ECE staff, teachers and providers, participate in the assessment since they may have different philosophies and behaviors regarding PA. It can be beneficial to have input from parents and legal guardians as well. One option is to have staff complete the assessment individually at a staff meeting. Staff can then discuss the assessment outcomes and come to a consensus on plan development. Discussions should be focused to develop a formulated plan of action.

PHYSICAL ACTIVITY AND POLICY ASSESSMENT TOOLS FOR EARLY CHILD EDUCATION SETTINGS

The following resources contain sample assessments and are based on best practice approaches. When completed, they help provide a snapshot of current policies and procedures. Assessments are a part of a comprehensive set of tools that may be included later in program implementation. Assessments can inform the development of a plan that address areas of need and serve as a post assessment comparison to capture any changes being implemented in the PA program.



- Let's Move Child Care (LMCC) Checklist This site provides a checklist of requirements to address five goals for ECE sites:
 - * Provide 1–2 hours of physical activity a day.
 - * No screen time for children under age two. For children two and up, limit screen time to 30 minutes/week during child care.
 - * Serve fruits or vegetables at every meal.
 - * Provide water during meals and all day.
 - * Provide breast milk to infants of mothers who wish to breastfeed. www.healthykidshealthyfuture.org/home/ startearly/quiz.html
- Nutrition and Physical Activity Self-Assessment for Child-Care (NAP SACC) This resource contains a self-assessment, goal setting, and action planning tools combined with workshops and technical assistance tools. The tools are designed to be used together to enhance policies, practices, and environments in the child care setting. www.gonapsacc.org/about-nap-sacc

NAP SACC Instruments

This resource provides an Infant & Child Physical Activity Self-Assessment, an Outdoor Play & Learning Self-Assessment and a Screen Time Self-Assessment for the child care setting www.gonapsacc.org/resources/nap-sacc-materials

 Creating Healthy Opportunities in Child Care Environments (CHOICE)-Best Practices for Child Care Nutrition and Physical Activity Environments Handbook

CHOICE is a Self-Assessment Questionnaire (SAQ) and Best Practices Manual to help with developing and implementing comprehensive written nutrition and physical activity policies for child care centers and homes. The SAQ is a list of 35 best practices for child care nutrition and physical activity environments. The four sections address child feeding practices, food served, physical activity, and staff and parent training.

www.cocokids.org/child-health-nutrition/c-h-o-i-ce-toolkit-self-assessment-questionnnaire/



• Yale Rudd Action Guide for Child Care Nutrition and Physical Activity Policies

This guide is intended to help local and community child care, early education and afterschool programs establish and implement policies and practices that encourage healthy lifestyles in children.

www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Nutrition/ CACFP/CCAG/CCAG.pdf

Preschools have learning standards similar to schools. The following resources will help LHDs understand the criteria that preschools are accountable for and how physical activity interventions can complement them.

 California Preschool Curriculum Framework Volume 2

This framework takes an integrated approach to early learning and describes how curriculum planning considers the connections between the domains of visual and performing arts, physical development and health as children engage in teacher-guided learning activities (see Chapter 3-Physical Development and Chapter 4-Health). www.cde.ca.gov/sp/cd/re/documents/ psframeworkvol2.pdf

California Preschool Learning Foundations Volume 2

The foundations outline key knowledge and skills that most children can achieve when provided with the kinds of interactions, instruction, and environments shown by research to promote early learning and development in the visual and performing arts, physical development, and health domains. <u>www.cde.ca.gov/sp/cd/re/</u> <u>documents/psfoundationsvol2.pdf</u>

Step 2: Plan

To create healthy changes in early care environments, LHDs can work with ECE staff to create an action plan. The plan should develop or strengthen site policies to support long term, sustainable changes to the site environment that increase PA and enhance nutrition practices. An action plan should be created based on the areas of improvement identified in the assessment, refer to the <u>Physical Activity Planning Worksheet</u> and <u>logic model</u> examples for details. Many of the assessment tools identified previously can be combined with tools and recommendations to assist with developing action plans. Action plans should focus on improving the quality and quantity of PA provided in the ECE and should consider the following:

Structured Adult-led PA	Unstructured PA (Free Play)
Infants: should be engaged in a total of one hour of structured play on a daily basis (1). The American Academy of Pediatrics recommends infants should reach a total of one hour of structured play or "tummy-time" each day by age three months. Structured play for infants is face-to-face with and adult who encourages the use or interest of toys by the infant. Structured play segments should be no longer than five minutes to start and build in duration.	Infants: In addition to structured PA, unstructured play for infants allows them to move freely by limiting the use of equipment and toys that restricts movement. Unstructured play should be done with adult supervision and be done in periods of up to 20 minute or as tolerated by the infant.
Toddlers: should engage in a total of at least 30 minutes of structured PA each day (2). Preschoolers should accumulate at least 60 minutes of structured PA each day (2).	Toddlers and Preschoolers should accumulate at least 60 minutes of unstructured PA a day (1). Unstructured play for toddlers and preschoolers involves letting the child explore their environment with little or no direction from a supervising adult or care giver. Activities such as sandbox time, playing tag, house or other play activity. Unstructured play can be alone or with other children.

Additional considerations for ECE are to:

- Enhance the environment to increase opportunities for moderate or vigorous physical activity (MVPA [examples running, jumping, dancing, etc.]).
- Set limits for screen time: no screen time for children under two years of age. For children two years and older in early care or early education settings, total media time should be limited to 30 minutes once a week. The 30 minutes of screen time should be reserved for educational or physical activity use only (1).
- Decrease sedentary time: toddlers and preschoolers should not be sedentary for more than 60 minutes at a time, except when sleeping (1).

- Increase visual displays and images of PA (posters, bulletin boards, photos, etc.).
- Increase parent education regarding the importance of PA (take home brochures, child assessments, newsletters, parent handbooks, etc.).
- Assure children are dressed for active play (appropriate shoes, dress in layers, keep a jacket or coat in cubby, etc.).
- Adopt and implement written policies and standards that promote PA.

PROGRAM PLANNING TOOLS AND STRATEGIES

The following resources outline effective intervention strategies for ECE environments and can be used to plan interventions that respond to identified needs. The programs identified in the assessment section also provide helpful examples and references for planning. Consider these resources when using the RE-AIM process to frame your PA program plan. Specifically, the <u>SNAP-Ed Strategies and</u> Interventions Toolkit provides USDA approved best practice level curriculums and programs to initiate PA programing strategies that address the introduction of PA at an early age.

 Preventing Childhood Obesity in Early Care and Education Programs 2012

This document is a set of national standards describing evidence-based best practices in nutrition, physical activity, and screen time for ECE programs. The standards are for ALL types of ECE settings, centers and family child care homes. The physical activity chapter addresses: Active opportunities for PA, playing outdoors, addressing air pollution while outside, caregiver/teacher encouragement, and policies and practices that promote PA. www.cfoc.nrckids.org/WebFiles/ PreventingChildhoodObesity2nd.pdf

 SNAP-Ed Strategies and Interventions: An Obesity Prevention Toolkit for States 2014 Update

This toolkit contains specific child care strategies for nutrition and physical activity, such as:

- * Development, implementation, and evaluation of physical activity policies that meet USDA, CDC, LMCC (Lets Move Child Care), or AAP (American Academy of Pediatrics) standards.
- * Limited screen time for children.
- * Development, implementation and evaluation of active transport programs.
- * Establishment of strong child care wellness educational programs and policies consistent with LMCC.
- * Improved capacity of child care providers to provide children with opportunities for physical activity throughout the day, including outside play whenever possible.



- * Support the development of child care wellness councils.
- * Provide parent education through the child care setting.
- * Encouragement of partnerships with community organizations (e.g. YMCAs, Boys and Girls Clubs) to bring more structured and unstructured physical activities into the environment.
- * Organized family activity days or celebrations that encourage physical activity.
- * Support child care providers to become more active through staff wellness policies and activities. www.snap.nal.usda.gov/
- National Physical Activity Plan 2010 This document contains child care recommendations in the schools section.
 - * Ensure that early childhood education settings for children ages birth to 5 promote and facilitate PA.
 - Develop policies that clearly define PA components for Head Start and other early childhood program providers.

- * Develop and institute state-level (SNAP-Ed) standards for early childhood education programs that require the delivery of safe and appropriate PA programming.
- Work with community college systems to include PA training as part of child care certification and early childhood training programs.
- * Advocate for PA policies at child care facilities that address the developmental needs of all children, including children with disabilities, those classified as obese, or children at high risk of inactivity.

www.physicalactivityplan.org/index.html

• Active Start: A Statement of Physical Activity Guidelines for Children From Birth to Age 5, 2nd Edition (2009)

This document contains specific guidelines for the physical activity of children from birth to age 5 to support its position statement and to address the developing child's unique characteristics and needs. The guidelines reflect the best thinking of specialists in motor development, movement, exercise and the physical activity needs of young children during the first years of life.

www.columbus.gov/uploadedFiles/Public Health/ Content Editors/Planning and Performance/ Healthy Children Healthy Weights/NASPE%20 Active%20Start.pdf

Step 3: Implement

After working with a partnering ECE program to develop a plan to address areas for improvement, LHDs can move forward by providing training, technical assistance and resources (many of the resources below also inform plan development process). Suggested steps include:

Review the needs assessment findings with ECE staff and determine priority areas to be addressed.

• Identify Best Practices and Evidence Based PA Curricula to increase minutes of structured (adult-led) physical activity which supports preschool learning foundations.



- Train ECE staff on PA Best Practices/Evidence Based Curriculum. It can be challenging to freeup teacher time for trainings. Work with directors to determine the best way to reach teachers. Suggested strategies include:
 - * Provide on-site train-the-trainer sessions by leading activities with children and mentoring teachers/providers at the same time.
 - * Provide training at staff meetings.
 - * Provide online training.
 - * Connect with partnering organizations. First 5 commissions and Child Care Resource and Referral Networks often provide trainings to providers for continuing education.
- Help staff identify opportunities for structured PA.

Physical Activity can be accumulated throughout the day. Examples include active transitions (lining up, transition to outside free-play), PA during circle time, teaching through movement, etc.

• Modify play spaces to encourage movement (inside and outside).

A designated space can be created for indoor PA, playgrounds can be painted to encourage movement, make PA equipment easily accessible, etc.



• Check in regularly with ECE staff during program implementation.

Discuss the best time for check-ins beforehand. During check-ins:

- * Discuss any barriers or obstacles that have been identified and talk about ways to address them
- * Discuss the status of the plan; as well as successes, accomplishments and next steps
- Provide additional information and materials for:
 - * Parents
 - * Newsletters
 - * Family nights
 - * Bulletin boards/visual displays
- Assist with the development of a policy to enhance PA practices and assure sustainability.

NEOP Approved Resources

The following NEOP approved resources can be used for your PA intervention.

• SPARK—Sports Play Active Recreation for Kids

The SPARK organization provides instructional strategies to increase the amount of time

devoted to Moderate to Vigorous Physical Activity (MVPA). Selected curricula require a NEOP approved Nutrition Education component to be allowable for use. <u>www.sparkpe.org</u>

 CATCH—Coordinated Approach to Child Health

The CATCH program is aimed at improving children's health through improvements in school nutrition, PA and food service. The CATCH program incorporates the school staff and parents of students to help deliver this message. The program is designed for preschool through 8th grade and afterschool. <u>www.catch.org/</u>

• Eat Well Play Hard in Child Care Settings

This site provides a Multi-component intervention that focuses on improving the nutrition and PA behaviors of preschool age children and their parents/caregivers. The program focuses on influencing nutrition and increasing physical activity in child care settings.

www.centertrt.org/?p=intervention&id=1105

· Be an active family

This is one of the 10 Tip Sheets in the Nutrition Education series from Choose My Plate. This tip sheet focuses on ways to be more physically active as a family. <u>www.nutrition.gov/subject/smart-</u> nutrition-101

Nutrition and Wellness Tips for Young Children

This handbook was developed by USDA to help child care providers. It presents wellness recommendations for children 2 through 5 years of age. It contains a series of tip sheets which include ideas for hands-on activities and practical application. <u>www.fns.usda.gov/tn/</u> <u>nutrition-wellness-tips-young-children</u>

• Hip Hop to Health Jr.

This is an Evidence-based healthy eating and exercise curriculum developed for children ages 3-5 years of age. This community based program consists of 14 interventions lasting approximately 45 minutes each that are conducted three times a week. Each intervention includes a nutrition and physical activity component. www.promisingpractices.net/program. asp?programid=278

POTENTIAL PARTNERSHIPS

LHDs can leverage resources and access a wealth of knowledge by creating partnerships within the early childhood sector. Current partners with access to resources that can help with any portion of the PA program implementation process should be considered as a potential partner when planning the PA program. Consider the PA program needs that have been identified and solicit partners based on those needs. A program such as WIC would be beneficial in a nutrition component of a PA program. A local gym may be able to supply equipment for PA activities. Other potential partners could include the following:

State Funded Preschools

State funded preschools are typically administered by Offices of Education to provide subsidized preschool opportunities for low-income families. This site provides general information on program regulations: <u>www.cde.ca.gov/sp/cd/op/</u> <u>cdprograms.asp</u>

Head Start Program

The Head Start/Early Head Start program is a federally funded program offering subsidized preschool and early care. The program is based on the premise that all children share certain needs, and that children from low-income families, in particular, can benefit from a comprehensive developmental program to meet those needs. www.caheadstart.org/about head start.html

• First 5 Children and Family Commission Each County in California has a First 5 commission. Each commission develops a county-specific strategic plan based on the county's needs. Commissions fund priority areas in the strategic plan that serve children from birth to age five and their families. www.ccfc.ca.gov/

- Child and Adult Care Food Program (CACFP) The CACFP program is responsible for food reimbursement in child care settings. These organizations are well connected with both family child care providers and youth serving organizations that provide PA programs. To find the CACFP program for your region go to www.fns.usda.gov/cacfp/child-and-adult-carefood-program
- Local University/Community College Faculty and students can be tremendous allies. Faculty can assist with best practices and students are often eager to gain experience leading activities with children. A partnership can be developed to incorporate an internship program to provide structured PA, create newsletters, and host community outreach events around PA. For information on the University of California Campuses go to www.universityofcalifornia.edu/ uc-system

For information on the California State University Campuses go to <u>www2.calstate.edu/attend/</u> <u>campuses</u>

- Child Care Resource and Referral Networks
 These networks often provide training for
 child care providers. They are instrumental in
 understanding the child care system.
 <u>www.rrnetwork.org/</u>
- Women, Infants and Children (WIC) Program
 WIC is a federally-funded health and nutrition
 program for women, infants, and children under
 age five. WIC programs have a plethora of
 educational materials and staff is experienced with
 the needs of young children.
 www.cdph.ca.gov/Programs/CFH/DWICSN/
 Pages/Program-Landing1.aspx



Step 4: Evaluate

The tools identified in the "Assess" section can be used to re-assess overall practices after the intervention as a post assessment. For example, if improving PA opportunities was determined as a goal, the same assessment can be used as the pre/post evaluation. This will capture the changes or outcomes of the PA program. If a logic model was used to help implement the program, review the specific <u>SMART Objectives</u> to identify stated program outcomes. The overall program goal can be used to measure program impact. The case study below describes the implementation of PA programing in the ECE setting and the significant outcomes.

Case Study Success Story: California State University Chico Research Foundation (CSUCRF) Project—Butte County

Intent of the intervention

The intent of this intervention was to work with State-funded preschools to help them increase the quality and quantity of PA in preschool settings through staff training, technical assistance, resources (PA equipment, outdoor improvements, etc.) and assistance with site policy development.



STEP 1: ASSESS

The NAP-SACC Physical Activity Assessment was conducted with teachers and supervisors and staff at each preschool site to determine barriers to daily PA, opportunities, current practices, and selfefficacy. The assessment determined a need for staff training, PA equipment, and a policy to sustain improvements in PA. The assessment also served as a teaching tool and allowed staff an opportunity to brainstorm solutions.

STEP 2: PLAN

After conducting the assessment, discussions between the Health Champions and Wellness team members (CSUCRF NEOPB representatives and County Office of Education representatives); decided it was best to increase the preschool staff's overall capacity. The project group decided to implement the best practices identified in "Preventing Childhood Obesity in Early Care and Education Programs 2nd Edition 2008". This resource was selected from several that were considered as it best fit the project circumstances identified in the RE-AIM process. Using the NAP-SACC tools, trainings would be focused on issues identified in the assessment; structured opportunities for PA, playing outdoors, teachers' encouragement of PA, and how to develop policies and practices that promote PA. In the assessment, freeing up teachers for trainings was an identified barrier; therefore, attendance at trainings was to be incentivized for the teachers. After the trainings were complete, LHD staff was to work with the preschools to help them create a PA policy. The Sports Play and Active Recreation for Kids (SPARK) Kindergarten through 2nd grade curriculum was selected and adapted to assure the daily recommended minutes of free and adult-led PA were conducted. The Early Childhood Head Start, Body Start Teachers Toolbox was used for periodic teacher trainings that would continue to be provided throughout the program. Parents would receive information about the importance of physical activity along with recommendations for seasonal clothing that would be conducive for physical activity.

STEP 3: IMPLEMENT

Partnerships

To implement PA policies for the preschool program, a partnership was made with the County Office of Education. Additional collaborative partners, WIC, CDPH and Fit Thru % (percent) members also participated. There are numerous state preschools in each county and there is a tremendous opportunity to impact many children and teachers while working with one umbrella organization.

Resources Used in this Intervention

Recommendations/Best Practices:

Preventing Childhood Obesity in Early Care and Education Programs National Association for Sports and Physical Education (NASPE) Active Start.

• Curriculum:

Sports Play and Active Recreation for Kids (SPARK) Early Childhood Head Start Body Start Teachers Toolbox

Teacher Trainings:

Developed teacher trainings to increase quality and quantity of PA by using resources identified above.

Policy Development:

Policies were created using the physical activity sections and sample policies from Nutrition and Physical Activity Self-Assessment in Child Care (NAP-SACC), recommendations in NASPE's Active Start and feedback from teachers and supervisors.

STEP 4: EVALUATE

The outcome of this intervention was captured using the same NAP SACC assessment. One example of the success of the project showed up in the pre and post studies done with teachers. Prior to the training less than 30% of teachers reported children participating in at least 90 minutes of physical activity per day while nearly 86% of teachers reported this amount of physical activity after the trainings and passage of the policy. All of the participating centers developed PA policies that promote PA time and improve playground environments.

END NOTES:

- American Academy of Pediatrics, American Public Health Association, and National Resource Center for Health and Safety in Child Care and Early Education. "Preventing Childhood Obesity in Early Care and Education: Selected Standards from Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs, 2nd Edition." 2012 www.nrckids.org/CFOC3/PDFVersion/preventing_obesity.pdf
- 2. National Association for Sport and Physical Education. "Active Start: A Statement of Physical Activity Guidelines for Children Birth to Five Years 2nd Edition." (Reston, VA: NASPE, 2009).
- Institute of Medicine of the National Academies, Report Brief "Early Childhood Obesity prevention Policies, 2011." 500 Fifth St. NW Washington, DC www.nationalacademies.org/hmd/~/media/Files/Report%20Files/2011/Early-Childhood-Obesity-Prevention-Policies/Young%20Child%20Obesity%202011%20Recommendations.pdf

Section 4 Physical Education and Physical Activity Programming in K-12 Schools







Physical Education and Physical Activity Programming in K–12 Schools

HYSICAL ACTIVITY and P.E. interventions in schools should aim to increase a school's capacity to provide ample opportunities for moderate to vigorous physical activity (MVPA) for both PA and P.E. Possible strategies can include:

- Providing opportunities for supervised recess before school.
- Enhancing opportunities for MVPA during recess.
- Incorporating PA breaks in the classroom.
- Adopting a standardized P.E. curriculum if one doesn't exist and appropriate training in the curriculum for staff.
- Promoting walking and biking to school and help to create safe routes to school.
- Creating PA clubs on campuses.
- Creating joint use agreements that open school playgrounds after hours and utilize campuses as community hubs for recreation.
- Adopting accountability measures to assure school wellness policies are being implemented.

Physical activity and P.E. both contribute to the development of healthy, active children. However, there is a distinct difference between PA and P.E. Physical activity is activity that includes the bodily movement of any type and may include recreational play, fitness, and sport activities. In fact, PA is almost anything that involves the muscular and skeletal systems. Physical activity should be part of a P.E. class; it should also be incorporated into other academic subject areas, including recess, and before and after school PA programs. Physical education programs offer the best opportunity to provide PA to all school age children. Physical education is usually curriculum based and deliberate; it provides the opportunity to teach school age children the health benefits of an active lifestyle. It also provides the skills and knowledge needed to establish and sustain an active lifestyle. Quality P.E. programs offer learning opportunities, appropriate instruction, and meaningful and challenging academic experiences for all participants.





Physical Activity Recommendations

Physical Activity can be defined as both structured and unstructured routines at home, school, work, transport (such as walking/biking to school), leisure, and recreation. In 2008, the U.S. Department of Health and Human Services (HHS) issued the *Physical Activity Guidelines for Americans*. These Guidelines recommend young people (ages 6–19) engage in at least 60 minutes of PA on most, and preferably all days of the week. Fewer than 25 percent of children in the U.S. currently accumulate 30 minutes of PA per day, according to the guidelines (1).

CALIFORNIA DEPARTMENT OF EDUCATION P.E. REQUIREMENTS

Physical Education is planned instruction that builds motor skills, teaches movement concepts and the health benefits of regular physical activity. Evidence has consistently shown that physically fit students perform better in school (2–5, 7, 8). The <u>Physical</u> <u>Education Model Content Standards for California</u> <u>Public Schools, Kindergarten through grade twelve,</u> 2008, list P.E. requirements for elementary school students as including 200 minutes of P.E per 10-day period. The standards for Middle and High School students are 400 minutes of P.E. per 10-day period.

PHYSICAL ACTIVITY PROGRAM DESIGN AT THE SCHOOL SITE

As with physical activity planning in other sectors, creating effective physical activity programs for schools first involves identifying and recruiting the Health Leadership Team or Health Champions. Once the team is recruited and oriented, they can begin to engage in the process of physical activity programming for the school site. The team should follow the four essential steps outlined in the introduction: *Assess, Plan, Implement, and Evaluate* (see Section 1 Introduction: Designing a Physical Activity Intervention).

Step 1: Assess

PA AND P.E. ASSESSMENT TOOLS

The main purpose of the assessment is to determine the present status of a school's overall needs, describe the factors that affect the health of the student and staff population, and factors that determine the availability of resources within the school and surrounding community to adequately address health concerns. After a review of the following assessment tools, consider which will fit into your <u>RE-AIM</u> PA program. Use the tools to guide the planning process in school PA programing. Some may even be used in a pre/post comparison method to evaluate the outcomes of an intervention.

Physical Activity School Score (PASS)

The PASS tools are a free, user-friendly, webbased, eight-item tool that assesses and increases awareness of evidence-based physical activity practices at elementary schools (e.g., P.E., recess, activity breaks, and active transport). Individuals (especially parents, teachers, school administrators, and school board members) interested in learning about and assessing physical activity opportunities at their local elementary school are invited to use PASS. It takes about five minutes to complete a single PASS tool. Upon completing each of the eight tools, respondents receive a numerical score with feedback and evidence-based recommendations on how the school can improve. www.activelivingresearch.org/ physical-activity-school-score-pass

• The Healthy Afterschool Activity and Nutrition Documentation (HAAND)

This instrument consists of three sections. The first section collects basic information about the current program and is designed to be collected via direct observation, a brief interview with the afterschool program leader/site director and written document review during a single day visit to an afterschool program. The HAAND instruments assess the extent to which the afterschool environment meets current physical activity and nutrition policies. www.activelivingresearch.org/healthy-afterschoolactivity-and-nutrition-documentation-haand

Physical Education Program Assessments Physical Education Curriculum Analysis Tool (PECAT) – (CDC)

The PECAT is a self-assessment and planning guide developed by the CDC. It is designed to help school districts and schools conduct clear, complete and consistent analyses of physical education curricula, based upon national physical education standards. <u>www.cdc.gov/</u> <u>healthyschools/pecat/index.htm</u>

Recess Assessment

Recess is an important time during the school day as it provides an opportunity for students to achieve part of the recommended 60 minutes of structured and/or unstructured moderate to vigorous active play for the day. <u>www.playworks.</u> <u>org/resource/assess-your-recess/</u>

WALK AND BIKE TO SCHOOL ASSESSMENTS

To assess Walk and Bike to School Programs, using an evidence-based checklist, youth or community residents should identify needs in qualifying communities and based on those needs, make recommendations, gain support, and shape an ongoing campaign for active transport to and from school. The assessment may consider access to and promotion of healthy food and beverages on those routes.

• Walk-ability Checklist—Safe Routes to School This tool helps give insight into the walk-ability of a neighborhood. It contains insightful questions, allowing the user to evaluate a neighborhood's walk-ability and provides both immediate answers and long-term solutions to a neighborhood's potential problems. <u>www.archive.saferoutesinfo.</u> <u>org/program-tools/education-walkability-checklist</u>

Bike-ability Checklist

This tool helps give insight into the bike-ability of a neighborhood. It contains insightful questions, allowing the user to evaluate a neighborhood's bike-ability and providing both immediate answers and long-term solutions to a neighborhood's potential problems. <u>www.pedbikeinfo.org/cms/</u> <u>downloads/bikeability_checklist.pdf</u>





Joint Use Agreement Assessment

Joint use is a technique to increase opportunities for children and adults to be more physically active using existing resources. It refers to two or more entities, usually a school and a city or private organization, sharing spaces designed for physical activity. These spaces can include indoor and outdoor spaces like gymnasiums, athletic fields and playgrounds. This simple concept of sharing existing resources keeps costs down and communities healthy.

www.citiesandschools.berkeley.edu/reports/ Partnerships_JU_Aug2010.pdf

• Joint Use Agreement (JUA) Checklist (ChangeLab Solutions, 2009)

This checklist is designed to identify items to be discussed and possible issues for the parties involved in a joint use venture to consider when developing a JUA to share existing facilities. www.changelabsolutions.org/publications/model-JUAs-national

Joint Use Calculator

One obstacle to sharing public school facilities is recovering the cost of joint use programs. The joint use cost calculator for schools will help:

- 1. Identify the elements of a school district's facility related costs.
- 2. Calculate full cost of ownership on a per square foot and per hour basis.

- 3. Determine policy decisions school districts need to make about which users to subsidize.
- Create fee structure options for various nonschool users based on the real cost of ownership. <u>www.bestschoolfacilities.org/jointusecalc/</u>

SCHOOL WELLNESS POLICIES ASSESSMENT

A school wellness policy is simply a written document, kept on file in the school or district office, which guides a local school or school district's efforts to create supportive school nutrition and physical activity environments. The development and use of school wellness policies are required by the Child Nutrition and WIC Reauthorization Act of 2004, and the Healthy, Hunger-Free Kids Act of 2012. Each school or school district that participates in the National School Lunch Program or the School Breakfast Program is required to develop and implement a school wellness policy.

 School PA Policy Assessment (S-PAPA) The S-PAPA assesses an elementary school's PA policy related to P.E., recess, and other PA opportunities. Designed as an inventory compiler, it uses open-ended and survey questions in a checklist format. The survey has three modules: (1) Physical Education, (2) Recess and (3) Other: Before/During and After School Programs. www.midss.org/sites/default/files/s-papa_______instrument_0.pdf

Step 2: Plan

Findings from the needs assessment will drive the RE-AIM or other planning process. The best time to develop a project logic model is when analysis of the data from the assessment is complete. A well written logic model will include; the current situation or status of the stated problems, resources available to address the problems, barriers to program success, and activities to address the problems as well as desired outcomes. This information should be readily available from a completed assessment. After assessing and identifying the needs of schools, the Health and Wellness team, program partners and public health practitioners can work with their school partners to create strategies to create systems change. Below are strategies, related assessment tools and evidence-based programs for specific priority areas for school PA programing.



SCHOOL-BASED WALKING AND BIKING STRATEGIES

Low-resource schools and school districts can develop Safe Routes to School programs and policies that include plans for program promotion, bike racks, safety education workshops, parent education, and on-site walking or biking programs for students. Best practices found in <u>evidence-</u> <u>based</u> programs such as Safe Routes to School toolkits are used to promote participation, attract volunteer support, or find other funds to support ongoing costs in low-resource settings.

Walking to School

A list of recommendations and resources from Tufts University provides suggestions to initiate walk to school programing. The additional resources, planning guides and toolkits assist parents, teachers, pediatricians and community leaders in creating an environment that promotes healthy eating and active living. <u>www.emerald.tufts.edu/nutrition/</u> childreninbalance/resources.htm

• The Active Transportation Resource Center (ATRC)

provides technical assistance and resources to Caltrans ATP awardees and interested parties. They will assist in building support and capacity among local programs. Engage low-income schools and communities in establishing Safe Routes to School and active transportation programs.

www.cdph.ca.gov/Programs/CCDPHP/ DCDIC/SACB/Pages/ActiveTransportation SafetyProgram.aspx#

- How to Build and Sustain a SRTS Program
 This resource has information to improve walking
 and bicycling conditions near a school and
 spread interest into other parts of the community.
 Neighborhood groups, school PTAs and local
 coalitions that continue in their efforts and make
 measurable improvements based on their evaluation
 will be rewarded with safer places for children to walk
 and bicycle and more children choosing safe routes
 to school. www.guide.saferoutesinfo.org/steps/
- Implementing SRTS in Low-income Communities and Schools: A Resource Guide for Volunteers and Professionals

The intent of this guide is to inspire nonprofit organizations, schools and community residents to come together to implement and sustain successful, culturally sensitive and inclusive SRTS initiatives. www.saferoutespartnership.org/

resourcecenter/publications/low-income-guide

• Safe Routes to School: Steps to Create a Safe Routes to School Program

The steps outlined in this material are meant to provide guidance by providing a framework for establishing a SRTS program. The information is based on successful implementation of the eightstep SRTS program plan in other communities. www.guide.saferoutesinfo.org/pdf/SRTS-Guide Steps.pdf



QUALITY PHYSICAL EDUCATION PROGRAMMING

To maximize the potential benefits of student participation in P.E. class, schools and P.E. teachers can consider increasing the amount of time students spend in P.E. (current recommendations are 200 min/10 days for elementary school students and 400min/10 days for secondary school students) or adding components to increase the quality of physical education. P.E. Teachers should choose from "Evidence-Based" curriculums. Evidence-Based curriculums have been scientifically tested. The results of the program are a direct result of the program intervention activities. Evidence-based programs are peer-reviewed, endorsed by a federal agency and included in the agencies list of effective programing. Following are evidence based P.E. programs:

 Sports Play Active Recreation for Kids (SPARK)

This organization provides interventions that use P.E. specialists to implement instructional strategies to increase the amount of time students spend in MVPA during physical education. www.sparkpe.org/

Coordinated Approach To Child Health (CATCH)

The CATCH program is comprehensive and evidence based. The program incorporates

multiple aspects of the school environment: the classroom, Child Nutrition Services, physical education, parents, and the broader school community. There are several distinct components focused specifically on Pre-Kindergarten, Kindergarten-fifth grade, sixth grade through eighth grade and an after school component. www.catch.org/

RECESS PROGRAMMING

Providing recess to students on a regular basis may benefit academic behaviors, while also facilitating creative, social and emotional development. A growing body of research has focused on the association between school-based PA and academic performance among school-aged youth. Studies found one or more positive associations between recess and indicators of cognitive skills, attitudes, and academic behavior (5).

PlayWorks Playbook

The Playbook contains the following tools; playground check list, developing student coaches, playground strategies and problem solving techniques for playground disagreements. The philosophy is to create a fun and safe place to play for all children. Programing includes school staff and student lead activities with a focus on school day and after school programs. Playworks offers an optional service where PlayWorks staff leads recess and playtime programing. www.playworks.org/resources/

CLASSROOM-BASED PHYSICAL ACTIVITY PROGRAMMING

Classroom teachers can incorporate movement activities and short PA breaks (5-20 minutes) into the classroom setting that may improve student performance and the classroom environment. The following are evidence-based classroom programs:

North Carolina Energizers

This document provides a list of classroom-based physical activities designed to integrate with academic lessons and concepts. The activities are designed to help teachers to create a positive atmosphere that enhances the self-esteem for all students and interject PA into the classroom. www.eatsmartmovemorenc.com/School.html

Active Academics

This website catalogs academic lessons that include PA aspects. The academic lessons address pre-kindergarten through fifth grade. Activity areas include; movement integrated in active learning, classroom energizers, recess and unstructured outdoor play and activities for large and small areas. Activities are designed around Common Core Standards.

www.activeacademics.org/

• Take 10!

This program is designed to help children understand the importance of fun PA and other healthful behaviors. The Take 10 program integrates grade-specific academic learning objectives in the content areas of language arts, math, science, social studies, and general health with short periods of structured physical activity in the K–5 classroom. www.take10.net/

Instant Recess—Interactive

This resource offers physical activity breaks for the classroom or playground on a DVD format. www.journeyworks.com/Posters-DVDs-Magnets-More/products/257/

AFTER SCHOOL PHYSICAL ACTIVITY PROGRAM PLANNING

The evidence suggests that superintendents of education, school principals, and athletic directors can develop or continue school-based sports programs without concern that these activities have a detrimental impact on students' academic performance (6). School administrators and teachers also can encourage after-school organizations, clubs, student groups, and parent groups to incorporate physical activities into their programs and events.

JOINT USE AGREEMENT PLANNING

 Playing Smart—A Joint Use Toolkit— (ChangeLab Solutions)

This nuts-and-bolts evidence-based joint use planning tool is designed to help school staff and other community leaders craft and implement joint use agreements. <u>www.changelabsolutions.</u> <u>org/publications/model-JUAs-national</u>

Step 3: Implement

Tactics for implementing quality P.E. and PA in K–12 Schools involve the following:

- Establish a PA committee or team that includes PA champions, school and school district personnel, students, their parents and interested community members.
- Develop a PA implementation plan including an evaluation component.
- Communicate school plans to the school board, school staff, students, parents and community partners.
- Identify evidence based and appropriate curriculum resources.
- Provide training for staff on curriculum and other resources.
- Organize and coordinate the use of PA equipment and facilities.





- Plan school-wide PA promotional events (e.g., Walk and Bike to School event).
- Collaborate with schools and other organizations to improve the school PA environment, including providing PA in classes and serving on school wellness committees.
- Provide recruitment strategies for parent and student volunteers.
- Engage champion moms, dads, grandparents and students to serve on a school wellness committee.
- Remember, SNAP-Ed-funded contractors are allowed to participate *but not lead* the development or implementation of school wellness committees or school health councils at SNAP-Ed eligible school sites.
- Assist in the development of <u>wellness policies</u> in schools and after-school settings that address increasing access to PA opportunities.
- Assist schools and/or districts with establishing partnerships with government or nonprofit organizations for joint use agreements to share recreational facilities.

- Collaborate with local youth-serving organizations working with low-income populations (such as parks and recreation, sports leagues, booster clubs, etc.) to ensure healthy foods and beverages are available for purchase at community events. Encourage organizations to seek healthy food and beverage sponsorships.
- Evaluate your program along the way in order to share the outcomes with all those involved in the program.

Step 4: Evaluate

The tools identified in the "assess" section can be used to re-asses a schools' overall PA/P.E. practices before and after the intervention. To evaluate components of the intervention more specifically, there are assessment tools in the "plan" section which can be used to assess specific components of the PA program. For example, if improving PA opportunities at recess was determined as a strategy, the recess assessment can be used as a pre and post assessment tool. If Safe Routes to School was a strategy, a walk-ability audit can be performed before and after program implementation. Additionally, the school wellness policy itself can be used to assess PA/P.E. practices before and after implementing a program. For Example, if the policy mandates 200 minutes of P.E. every 10 days, a teacher survey can capture practices before and after the intervention.

Success Story: Joint Use Joint Development Success in Sacramento California

In 2002, River City High School in West Sacramento California was serving nearly twice the number of students it was designed to serve. Due to the lack of space the district decided to build a new campus. While seeking a potential partner in a possible joint use project for the new campus the school district heard West Sacramento Parks and Recreation was in planning stages to develop a new indoor community recreation facility in the area of the school. The two entities met to discuss joint use alternatives. When considering the needs of the students, soccer and baseball fields, gymnasium, and pool; and the needs of the general population in West Sacramento the concept of a \$115 million joint use recreation center on school district land, adjacent to the campus; was proposed to the city by the planning team. After some negations the result was a public facility, built on school land, the city leases and manages with a membership based business plan.

The completed recreation center is comparable to a high-end health club with climbing wall, cardio center and weight room, gymnasiums, dance space, child care, water-park, swimming pool, tennis courts and playing fields."The new campus expands the services the high school can contribute to the community", says Richard Parks, project architect. Students have regular access to a small gym, playing fields, and pool through P.E. classes. The center has spurred the creation of water polo and rugby teams of which the majority of members are River City High students. The center also allows a school break dance group to use the dance space to practice. According to Vice Principal, Sandi Reese gang activity and vandalism have decreased while student academic performance has increased.

ADDITIONAL RESOURCES:

· Comprehensive School Physical Activity Programs: A Guide for Schools (CDC)

Developed in collaboration with the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD) and experts in the field of school-based PA, the guide includes steps to engage stakeholders in developing a Comprehensive School Physical Activity Program (CSPAP) that helps students meet the daily recommendation of 60 minutes or more of PA. A comprehensive school PA program includes P.E., PA during school, PA before and after school, staff involvement and family and community engagement. Schools can use the guide to develop an action plan, implement strategies and evaluate their CSPAP.

- Educating the Student Body: Taking Physical Activity and Physical Education to School
 This material provides recommendations for strengthening and improving programs and policies for PA and
 P.E. in the school environment including before, during and after school.
 www.nationalacademies.org/hmd/Reports/2013/Educating-the-Student-Body-Taking-Physical-Activity-andPhysical-Education-to-School.aspx
- Youth Physical Activity Guidelines Toolkit: Centers for Disease Control and Prevention (CDC)
 The Youth Physical Activity Guidelines Toolkit highlights strategies that schools, families, and communities
 can use to support youth physical activity.
 www.cdc.gov/healthyschools/physicalactivity/guidelines.htm

END NOTES

- 1. U.S. Department of Health and Human Services, "2008 Physical Activity Guidelines for Americans." www.health.gov/paguidelines/guidelines/
- 2. D. M. Castelli, et al., "Physical Fitness and Academic Achievement in Third-and Fifth-Grade Students." The Journal of Sport and Exercise Physiology (2007), vol. 29, pp 239–252.
- Chomitz. Virginia R., PhD. Et al., "Is There a Relationship Between Physical Fitness and Academic Achievement? Positive Results From Public School Children in the Northeastern United States." Journal of School Health (2009) Vol. 79, issue 1, pp. 30–37.
 www.pbac.sa.edu.au/Content/Resources/Academic%20achievement%20and%20PA.pdf
- Hillman, Charles H. et al. "Aerobic Fitness and Neurocognitive Function in Healthy Preadolescent Children", Department of Kinesiology, University of Illinois at Urbana-Champaign, Urbana-Champaign, IL., The Journal of Medicine & Science in Sports & Exercise 2005 Nov. Vol 37 no. 11, pp 1967–74 www.nemours.org/content/dam/nemours/www/filebox/service/preventive/nhps/pep/aerobicfitness.pdf
- Wittberg, Richard A., PhD. et al., "Children's Aerobic Fitness and Academic Achievement: A Longitudinal Examination of Students During Their Fifth and Seventh Grade Years." American Journal of Public Health, December 2012, Vol. 102, no. 12, pp. 2303–2307.
 www.ajph.aphapublications.org/doi/abs/10.2105/AJPH.2011.300515
- California Department of Education, "Physical Education Model Content Standards for California Public Schools-Kindergarten through grade Twelve, January 2005." Reposted September 17, 2010. <u>www.cde.ca.gov/be/st/ss/documents/healthstandmar08.pdf</u>
- 7. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, The National Center for Disease Prevention and Health Promotion, Division of Adolescent and School Health. "The Association Between School Based Physical Activity, Including Physical Education, and Academic Performance." Atlanta, GA: U.S. Department of Health and Human Services; 2010. www.cdc.gov/healthyyouth/health and academics/pdf/pape executive summary.pdf
- Carlson SA, Fulton JE, et al., "Physical Education and Academic Achievement in Elementary School: Data from the Early Childhood Longitudinal Study." American Journal of Public Health 2008, Vol. 98, no. 4 pp.1–7

OTHER REFERENCES

 National Association of Sport and Physical Education, NASPE Resource Brief, " The Difference Between Physical Education and Physical Activity." 1900 Association Dr. Reston VA. www.shapeamerica.org/standards/pe/default.aspx

Section 5 Physical Activity in Community Settings, Walking Interventions







Physical Activity in Community Settings Walking Interventions

HYSICAL ACTIVITY in urban community settings calls for interventions that address a wide range of diversity. Whether it be based on age, culture, physical ability or other concern, diversity not only creates a challenge for public health departments seeking to promote active communities across differences, but it also presents opportunities to engage individuals in a way that can celebrate those differences, form bonds and build bridges.

Municipalities across the country have discovered the benefits of physically active communities. Through PA, local community leaders can build key partnerships to create more walkable streets, increase access to parks and open spaces, address neighborhood safety, improve educational outcomes for children, tap into underutilized



facilities and attract outside funding. By introducing and promoting walking programs, civic leaders can address major public health concerns, such as chronic diseases associated with sedentary lifestyles.

Why Walking?

According to the 2009 California Health Interview Survey, 77.2 percent of adults in California walked for transportation, exercise or fun (1). The U.S. Surgeon General's office states, walking is currently the most commonly reported form of physical activity among U.S. adults. Walking is a simple form of physical activity that can be done almost anywhere. Encouraging Americans to add walking to their daily routine has enormous long term health benefits and can help reach the physical activity goals outlined in the <u>Physical Activity Guidelines</u> (2).

The Benefits of Walking

Walking is accessible to individuals of all ages and socioeconomic backgrounds. It maintains and can increase the strength and endurance of individuals who have difficulty with movement, are seeking to be more active, as well as individuals already leading active lifestyles and want to challenge themselves. Walking is beneficial to individual and community health.

For individuals, walking:

- Decreases the risk of many chronic diseases and can help prevent certain health conditions such as coronary artery diseases, stroke, certain types of cancer, type 2 diabetes, and arthritis.
- Builds aerobic capacity for overall better health.
- Builds bone strength and helps fight osteoporosis.
- · Lowers blood pressure.
- Increases positive outlook and decreases depression.
- Promotes balance and reduces the risk of falls.
- Helps combat obesity.





- Increases energy.
- Reduces stress.
- · Lowers the risk of premature mortality.

For communities, walking:

- Helps individuals, groups and families enjoy outdoor spaces such as parks.
- Creates a presence on the streets to help combat crime and foster safety.
- Provides social interaction and support.
- Unites people around common goals.
- Makes physical activity and recreation easily accessible.
- Makes neighborhoods more "livable".
- Relieves traffic congestion due to the decrease in driving.
- Supports business by increasing "foot traffic".
- Fosters independence for individuals, youth and older adults who don't drive.
- Allows residents to advocate for streetscape improvements to decrease traffic-related injuries and fatalities (2).

How much walking is needed to be beneficial?

The 2008 Physical Activity Guidelines for Americans,

developed by the U.S. Department of Health and Human Services (USDHHS) recommends that all adults engage in at least 150 minutes a week of moderate-intensity aerobic physical activity. Individuals who walk briskly for about 30 minutes per day can easily meet that recommendation for better health. However, even a minimal amount of walking can provide significant health benefits for an individual who is otherwise sedentary (3).

PHYSICAL ACTIVITY RESOURCES

The resources listed below feature government guidelines for PA for adults and children. The American Heart Association and CDC walking programs provide information on the benefits of walking and how adults can maintain and lose weight through a comprehensive walking program. Consider these programs when using the <u>RE-AIM</u> process and developing <u>logic model</u> for your PA program.

Physical Activity Guidelines for Americans 2008

For information on the Recommended Physical Activity Guidelines for Americans visit www.health.gov/paguidelines/guidelines/

American Heart Association

This website provides information on the benefits of walking, how to join or start a walking club, staring a walking group at work and other walking related information.

www.heart.org/HEARTORG/HealthyLiving/ PhysicalActivity/Walking/Walking_UCM_460870_ SubHomePage.jsp

Centers for Disease Control

For additional information about the benefits of walking go to the CDC website below. www.cdc.gov/vitalsigns/walking/index.html

Step 1: Assess

ASSESSING COMMUNITY WALKABILITY

Every community is different; there is no "cookiecutter" solution to increasing walking and walkability in all communities. The term "Walkable Communities" extends to urban design policies and practices such as creating environments that are more walkable, more bikeable, accommodate safe active transportation, as well as have inviting parks and other open spaces. A walkable neighborhood, where all people can safely and easily move about on foot and in which locations, can be easily accessed by walking, and has many benefits.

To develop walkable routes and pathways a "Walkability Audit" is required. A walkability audit tool is designed to assess pedestrian facilities, destinations, and surroundings along and near a walking route and identifies specific improvements that would make the route safe, more attractive and useful to pedestrians. The walkability audit can be conducted by a local health district, the leadership team, or as a community exercise as part of a walking group activity. A community walkability audit will address some of the following questions:

Walkability Audit Questions

- Is the neighborhood/route safe?
- Is the walking path close to construction zones, fences, buildings, noise pollution?
- Is the traffic "calm" in that area?
- Can pedestrians get across the street safely?
- Are the sidewalks in repair?
- Is there cracking, buckling, overgrown vegetation, standing water, etc. on or near walking path?
- Is there enough walking space?
- Are the sidewalks level?
- Are there safe pathways for walking?
- Are sidewalks complete?
- Are street signs unobstructed?
- Is the walking area clear of debris?
- Is there continuous sidewalk on both sides of road, or is it completely away from roads?
- Is the route accessible for wheelchairs, people using walkers and other physically challenged individuals?
- Are there any other concerns?

Conducting a walkability audit provides an opportunity to raise awareness about the conditions in the area. Neighborhood strengths and assets can be highlighted, while challenges and concerns can be documented appropriately and improvements can be sought. Communities that seek to create opportunities for individuals to become more physically active through walking should also consider *Policies, Systems and Environmental* changes (PSE) that lead to these long-term, sustainable solutions (4).

THE ROLE OF THE LOCAL HEALTH DEPARTMENT

Local Health Departments (LHDs) can play a key role to increase walking and walkability in SNAP-Ed populations and other communities in many ways by:

- Taking the lead in identifying the major health challenges to be addressed in local communities.
- Serving as convener of key walking and walkability program partners such as city planners, traffic engineers and active transportation professionals and advocates.
- Collaborating with PA professionals to provide resources and technical assistance.
- Facilitating partnerships with schools, health and community organizations.
- They can convene a wide variety of other public and private partners dedicated to healthy environments and individuals such as state, regional and national parks as well as parks and recreation professionals (5).

COMMUNITY WALKABILITY AUDIT AND ACTIVE COMMUNITY TOOLS

The walkability audit can help plan and/or strengthen a walking program. Conducting this audit and even taking the next steps to advocate for improvements in the physical environment can be considered an integral part of the groups' goals. It is important to conduct this audit early in the group's planning process (6). Following are free, user-friendly tools for assessing a community's walkability and promoting active lifestyles.

• **Pedestrian and Bicycle Information Center** The center provides a variety of planning tools including audits, counts, surveys, inventories and information sources for making communities more walkable and bikeable. www.pedbikeinfo.org/planning/tools_audits.cfm

- Active Transportation Safety Program
 Information on walking clubs, walkability audits,
 safe routes to school and other areas is available.
 <u>www.cdph.ca.gov/Programs/CCDPHP/
 DCDIC/SACB/Pages/
 ActiveTransportationSafetyProgram.aspx</u>
- Active Living By Design

Active Living by Design's vision is healthy communities, where routine physical activity and healthy eating are accessible, easy and affordable to everyone. The web site focuses on community led change by working with local, state and national partners to build a culture of active living and healthy eating. www.activelivingbydesign.org

- Leadership for Healthy Communities (LHC) A branch of the Robert Wood Johnson Foundation designed to support local and state government in their efforts to reduce childhood obesity through public policies that promote active living and healthy eating. The LHC produces a wide variety of resources, including fact sheets, issue briefs, reports, presentations and other materials regarding community walkability. www.activelivingleadership.org
- Active Living Research

This organization conducts research and provides resources to prevent obesity and create active communities. The site provides information, tools resources, news, events, grants and research summaries on active living topics. www.ncsl.org/research/health/leadership-forhealthy-communities.aspx



• U.S. Department of Transportation Federal Highway Administration

This site offers the "Residents Guide to Creating Safe and Walkable Communities". The guide is designed to be used by anyone, novice to professional, looking for ways to improve the safety and comfort of their neighborhood streets. The guide provides examples from other communities working to improve pedestrian and bicycle safety. The guide includes ideas and resources to help residents learn about issues that affect walking and bicycling conditions, find ways to address or prevent these problems, and promote safety for all road users. Also included are several audit tools that can help walking group leaders identify and document concerns, and better advocate for change.

www.safety.fhwa.dot.gov/ped_bike/ped_cmnity/ ped_walkguide/residents_guide2014_final.pdf

WALKING GROUP PARTICIPANT ASSESSMENT

In addition to assessing the physical environments (whether they are city streets or rural roads) walking group leaders will need to assess target group needs, and desires, as well as personal and group goals. The participant assessment involves answering the questions in the side bar box on the right.



Topics to Address When Assessing the Walking Group Participants

- Who will participate in the group?
- What are the core needs of the individuals who will participate in the group?
- Are there group health goals/concerns/risks to consider?
- What are the relationships that bind the individuals together?
- What are the physical abilities of the participants?
- How often do they meet?
- What are their health education needs?
- How do they communicate with each other?
- What are their interests?
- Where would they like to walk?
- How often would the group want to walk?
- Is there a specific time that the group likes/needs to walk?
- Do they have any specific concerns that should be addressed?
- Are there barriers to walking?
- Are there barriers to physical activity?
- What will be needed to address barriers?
- Are there individuals with special needs in the group?
- What are individual participant goals?
- What are individual participant concerns?
- What are participant differences? Similarities?
- Is there a preferred walking route?

Assessments to create walking groups can be conducted through interviews, surveys or focus groups. The assessment will help answer the following questions:

Populations/Participants

- How many participants will be involved?
- When will they walk?
- How long will they walk?
- Will the group walk together or break into groups by ability?
- Will the group be age specific?
- Other?



Logistics

- Where will the group walk? What is the route? Is the route marked?
- When will the group walk? Launch date? Before or after work?
- Will the route be predetermined or part a group walkability audit process?
- Will the group walk parks, streets, malls, school tracks, or other?
- Will the group participate in activities other than walking? For example, will there be a nutrition education component to the program?
- What will be the "home base" location or meeting point for the walks?
- How will the group communicate among themselves?
- How will success be measured? (Evaluation)
- Will incentives be involved?
- What resources are needed, if any?
- Will the group walk in areas other than local? If so, will transportation be needed?
- Who will be responsible for identified tasks?
- How will the group/program be sustained over time?

Step 2: Plan

PHYSICAL ACTIVITY PROGRAM DESIGN IN COMMUNITY SETTINGS

As with other PA planning, creating effective PA programs, such as walking interventions, begins by identifying and recruiting a *Health Leadership Team or Health Champion(s)* to lead the process. Leaders are critical to the success of programming. The Health Leadership Team provides group cohesion, spearheads the development of health advocates and promotes and ensures program sustainability. When planning the development of a leadership team, consider the following:

- Who will be the group leaders?
- What will be their role(s)?
- Does the team include members of the target population?
- Will there be community partners? If so, what can they bring to the table?

Once the team is recruited and oriented, they should begin with the four essential steps outlined in the introduction: **Assess, Plan, Implement and Evaluate** (see Section 1: <u>Designing a Physical</u> <u>Activity Intervention</u> for a complete description), to initiate the process of planning the walking activity intervention.

After leaders have assessed the participants' needs, desires and the walking environment they are ready to move on to the planning phase. Begin planning keeping the <u>Social Ecological Model</u> in mind. Consider the dynamic interrelations among the participants' wants and desires and environmental factors you will be working with; personal safety, participant support, city infrastructure and other city services. Consider issues at the individual level, build to address group needs and expand to the entire community.

Whether the walking group being developed is targeted toward a small group of individuals, such as parents of children in an before and after-school program, or larger groups such as employees in a work environment or members of a faith congregation, assessing participant needs is the key to effective programming. Planning is based on the information gained through the audit process.

Documentation of the responses from the audit questions provides the leadership team with the Program Plan information; which should identify details for the overall plan, demographic information of the group participants as well as the logistics of the walk route. This is a good point to revisit the <u>RE-AIM</u> process to address specific items found in the assessment. It is also an excellent opportunity to create a logic model to visually help plan out the program. A well written logic model will include; the overall goal of the program, current situation or status of the stated problems, resources available to address the problems, and other key components for program implementation. Program objectives should be written in the "SMART" format, Specific, Measurable, Achievable, Realistic and Time specific for easier implementation and post program assessment.

Step 3: Implement

IMPLEMENTING THE WALKING GROUP

Once the walking plan has been completed, marketing the activities is essential for a successful launch to the program. Advertise the walking group among all the community groups who have a member of the Leadership Team in the group. Also notify local community centers, PTA, faith based and other groups/organization in the area. To promote the walking group "piggy-back" or tag onto any social media already being used by the groups who



have a member on the leadership team. Include information about the group, the date, time and location of the preliminary group meeting. At the first meeting cover topics such as;

- A "meet and greet", introduce individual participants to each other. Give an overview of the walking group goals and concepts through a training/presentation.
- Explain the role of the leaders (provide support and direction to the group and individuals).
- Explain the health benefits, fitness facts and requirements related to walking such as; why walk, how to walk, nutrition (including hydration) stretching, growing through fitness levels, fun, shoes, walking safety, etc.
- Provide time for participants to set individual goals (e.g. increase frequency of walking or biking to school).



- Establish walking groups, locations to walk and set future meeting dates.
- Discuss expectations such as consistency and mutual support.
- Discuss the method of monitoring progress and meeting goals.
- See the Resource section for details on walking for fun and fitness.

Step 4: Evaluate

Evaluation methods should always be a part of the program planning stage and logic model development. Considering how and what components of the program will be evaluated at the onset will result in a concise and accurate evaluation of the program. Process evaluation can assess the reach of the program, were the participants from the target population, did they complete the program, if not why? Will the outcomes of the program measure the level of intended behavior change, frequency and duration of walking, number of miles walked, weight loss among participants? Impact evaluation will measure long term effects of the program, such as, will weight loss among participants influence the rate of chronic diseases. Consider all the possibilities in the evaluation process, each component of the evaluation can be done by partners with expertise in a specific area. Marketing can be done by parks and recreation, outcome and impact may be able to be completed by the LHD and their epidemiologist.

TYPES OF EVALUATION

Process evaluation measures actions taken in pursuit of program outcomes. Process evaluation provides the information needed to make adjustments to the strategies implemented in a program in order to strengthen program effectiveness (see Section 1: Introduction Evaluation for more information and resources).

Outcome evaluation results tell you the significance and level of success of a program. Outcome Evaluation assesses program goals and objectives to determine if changes to behavior, attitude or knowledge have been achieved through the intervention. Outcome results can also be extremely useful in communications that help you respond to questions about your program.






EXAMPLE EVALUATION TOPICS:

- Recording how many walkers sign up and have consistent participation.
- Collect Walkability Checklists and chart environmental and/or policy changes made to the walk route and neighborhood once the group has started.
- Conduct satisfaction surveys for lead staff, members and participants.
- Distribute neighborhood questionnaires to collect area resident's perspectives.
- Record the number of collective or individual steps.
- Working with a certified fitness professional to record pre/post functional fitness assessments measuring;
- * Muscle strength and endurance
- * Aerobic endurance
- * Range of motion
- * Balance, gait, mobility
- * Fear of falling (seniors)
- Other individual data measured by a licensed clinician including (blood pressure, weight, bone density, etc.)
- Did the information you collected tell you what you needed/wanted to know?
- Did you recruit the number of people you expected, if not why?
- Did advertising/marketing of the group reach the intended audience?
- Was follow up conducted to obtain the satisfaction level of group leaders and others involved in the program?

For more information on walking programs visit the Active Transportation program site at www.cdph.ca.gov/Programs/CCDPHP/DCDIC/ SACB/Pages/ActiveTransportationSafety Program.aspx

WALKING GROUP RESOURCES

Everybody Walks

This website provides a variety of resources on walking for individuals and groups. www.everybodywalk.org

The Walking Site

This site provides information on how to begin a fitness walking program and a forum for frequently asked questions about walking and other resources. www.thewalkingsite.com

American Heart Association

This site provides tips, tools, program design instruction and other information and resources on all levels of walking. The site also includes information on healthy eating and walking club logistics. <u>www.heart.org/HEARTORG/</u> <u>HealthyLiving/PhysicalActivity/Walking/Walking</u> <u>UCM_460870_SubHomePage.jsp</u>

America's Walking

This web site provides information and resources in achieving pedestrian friendly neighborhoods. It also provides walking tips and techniques. www.pbs.org/americaswalking

• Safe Routes to School and Walk to School Sites.

This site provides information related to making the trip from home to school safer for children. The resources offered focus on safety, health, community health, and events. Information on training programs, technical assistance, and walkability tools are also provided.

- * Safe Routes to School <u>www.dot.ca.gov/hq/LocalPrograms/saferoutes/</u> saferoutes.htm
- California Safe Routes to School www.casaferoutestoschool.org

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• Walking

This website is all about walking for individuals. It includes information on adopting a lifestyle that integrates walking. <u>www.walking.org</u>

American Volkssporting Association

This website provides information on Volkssporting, a sport started in Germany. Volkssporting is an aerobic based personal fitness program preformed in a group environment. It includes noncompetitive walks, hikes, bike rides, swims and cross country skiing during the winter time. www.ava.org/What We Are About/AVA Fact Sheet.pdf

Silver Sneakers

This site provides information on the SilverSneakers Fitness® program designed for older adults. The program promotes physical activity and fitness through fun energizing programs that help seniors take greater control of their health. More than 65 Medicare health plans offer the program as a benefit to members. Silver Sneakers partners with local fitness facilities and offer programs specifically designed for older adults. Facilities are handicapped accessible and include options such as gyms, YMCA's, Curves® and other programs. www.silversneakers.com/

Walk 4 Life

This site includes tools for individuals and groups who want to start walking or launch a walking group. It provides information on trails, walking tracker tools, apps, etc. <u>www.walk4life.info</u>

ARGUS by Azumio

ARGUS is a free phone app available for both I-phone and Android. The app uses GPS to record your walking activity and exercise statistics. Use Argus to count steps, total distance, calories, heart rate, track meals and more. Join a community challenge or create one with friends. ARGUS works with walking, running, biking and other activities. www.azumio.com/s/argus/index.html

Walking Group Success Stories

WEST OAKLAND HEALTH CENTER (WOHC)

Intent of the Intervention

The WOHC is a non-profit community health center providing primary care, mental health, and substance abuse recovery services to residents of West, North and East Oakland, Emeryville and Southwest Berkeley. Its mission is to improve the health and well-being of residents of these communities and to reduce morbidity, preventable disability and premature death. Services also include SNAP-Ed and WIC services and on-site support to enhance food security. The WOHC primarily serves low-income residents. It is located in a section of Oakland that has very few open spaces for physical activity. While there are parks in the area, many of them are considered unsafe and therefore are often underutilized.

Health professionals at the WOHC noticed negative trends in health data among individuals from the surrounding neighborhood who use the Center. Providers determined that by increasing PA awareness and behaviors among some of their clients, the center could see improvements in their client's health status. After a review of the clientele and PA options, the center chose to create a walking club. The *West Oakland Walking Club* was designed to improve client health by promoting active lifestyles through education, modeling healthy behaviors, increasing access to active spaces and providing social support to clients making this lifestyle change.

Step 1: Assess

The WOHC routinely maintains comprehensive client profiles targeting specific health challenges and outcomes. Based on those records, a team of providers consisting of the Medical Director, Health Education Director, Head Nutritionist, WIC Director and Outreach Coordinator determined that many of the health challenges their clients were experiencing could be improved by physical activity.

Step 2: Plan

A goal to positively influence the health of WOHC clients was established. Given the broad range of client profiles and needs, planning physical activity programming and evaluation WOHC staff began with identifying the following steps:

 Assemble a team of professionals who could support a health program including participants from a variety of perspectives.

The WOHC team recognized the need to engage outside partners such as:

• Physical activity specialist, parks and recreation partners, YMCA, faith organizations and others.

The WOHC established the program objectives to create a program that;

- Used a program approach that was proven effective for a wide variety of participants
- Included education elements
- · Could be medically evaluated
- · Helped to promote lifestyle changes
- Was motivating, affordable and enjoyable
- Allowed for social support
- · Could be sustained.

Based on the desired outcomes, the team chose walking clubs as an effective intervention for their clients. The WOHC team and partners reviewed existing programs and selected the Center for Disease Control and Prevention (CDC), "<u>The CDC's</u> Guide to Strategies to Increase Physical Activity in the Community." to help implement the program. The guide identifies walking as an effective intervention in community settings due to its strong social support component. "Interventions that use social support within community settings can create opportunities for physical activity by reducing or eliminating many of the barriers to physical activity (e.g., safety, motivation)." To plan the intervention, the team determined:

- Which clients would be included in the walking groups and how they would be partnered?
- How individual health progress would be monitored and by whom?



- How walking would be conducted (i.e. in groups, by collective miles, etc.)?
- How often participants would check in and how they would check in?
- How long the program would run?
- Whether there would be environmental elements to the program
- Program outcomes of health status, distances walked and new behaviors were to be evaluated

Step 3: Implement

To begin the program, the team designed outreach materials to announce the launch. Each team member targeted clients who could benefit from the Walking Program. All partners and team members were invited to the kickoff meeting where the program was explained and attendees were invited to participate. Individuals who chose to be a part of the program were given background materials on the benefits of physical activity, sheets to monitor their daily nutrition, a pedometer and a program schedule with projected benchmarks.

Five teams of about 10 participants each were organized. Teams were organized according to mode of evaluation. For example, individuals who were experiencing high blood pressure were assigned to clinical team leaders who could monitor their health and blood pressure. Teams were encouraged to compete with each other for steps and other benchmarks. Individuals were encouraged to select a buddy or two and over a ten-week period recorded their progress based on steps (pedometer readings), minutes of walking, or participating in a variety of physical activities. During walks, teams that participated in urban walking also assessed walkability of the selected route with particular attention to safety.



Step 4: Evaluate

Participants were evaluated on several levels. All of these were recognized at a final celebration event:

- Total number of steps recorded by the group.
- Total number of miles accumulated.
- Number of participants who created new habits (monitored and recorded by health educators).
- Total number who were consistent with physical activity and proper nutrition over the ten-week period.
- Individual health improvements: Monitored and recorded by clinicians (blood pressure/blood sugar/BMI/ cardiovascular/arthritis, etc.).

SACRAMENTO SENIORS "NEIGHBORHOOD WALK" PROGRAM

Intent of the Intervention

As the 'baby boom' generation ages, the number of Americans 65 years and older will double from 35 million to 70 million by the year 2030. Regular moderate physical activity can extend the lifespan and prevent or slow the development of chronic diseases, such as heart disease and diabetes, as well as decrease the likelihood of falls and depression (6). Since 2000, Sacramento's walking program, "Neighborhood Walk," has provided a social support network to increase physical activity among older adults.

Step 1: Assess

The City of Sacramento Parks and Recreation Department assessed older adults walking needs. Assessment results indicated seniors have specialized pedestrian needs, such as increased time to cross streets, access to shady trails with benches, clearly marked crosswalks and traffic calming engineering. Knowing the needs of seniors, the walk program should include assessments for:

- Identifying personal and environmental barriers to walking by older adults
- Identifying potential environmental policy solutions to reduce barriers to walking by older adults
- Identifying a course of action to advocate for solutions.

Step 2: Plan

Based on the assessment of seniors walking needs, the City of Sacramento Parks and Recreation Department identified the following Multi-Sector partners for collaboration in development of the walking clubs;

- Residents
- · City government and policymakers
- Community and service groups, such as neighborhood associations
- · Local businesses
- · Local universities and colleges
- City Police

The leadership group planned to create ten walking groups in diverse geographic neighborhoods in greater Sacramento. With residents' support, city staff gathered information about local community needs of older adults. Based on this information leadership group members and city staff decided the primary method to promote the groups would be with print materials as seniors are most likely to use them for information. Print materials about the walking groups included ads in regional newspapers, and articles in community newsletters, while fliers were posted in local establishments. Citv staff decided a secondary method of door-to-door advertising would also be an effective way to recruit participants. The city also decided to provide small incentives such as "Neighborhood Walk" t-shirts and sun visors to motivate participants.

Step 3: Implement

Once the groups were established, city staff provided minimal oversight. The groups were selfpaced, self-motivated, and self-directed. At the beginning of the program, staff helped groups establish a route with a neutral meeting place, such as a park or community center. The groups determined their own routes and meeting times. To recruit more members, groups distributed fliers as they walked. City staff encouraged groups to meet socially outside of the walking groups to strengthen group bonds.

Participation: Keeping Participants Motivated

Of the ten original groups, five remained after the first two years. However, through promotion of the "Neighborhood Walk" program city staff reestablished two of the groups that disbanded and created an additional six groups. In 2005, sixteen 'Neighborhood Walk" groups were active. City staff found motivational activities such as; a lecture series, which meets every six weeks on various health and aging issues and a newsletter profiling other senior walkers were key to sustaining the groups. Quarterly social functions, such as barbeques, are also held.

Select walking groups have been featured on television spots, which provide positive feedback for participants and establish new community norms. Older adults are inspired by newsletter testimonials from other older adult walkers and have joined walking groups after hearing about people's improved health from participation in the "Neighborhood Walk" program.

Step 4: Evaluate

Based on group records, at the end of the program, approximately 25% of the initial participants continued to walk in the walking groups, on their own, or with a neighbor. Reasons for the dissolution of groups vary; for example, one group lost momentum during the winter. Traditionally, about 50% of individuals drop out of an exercise program in the first 3–6 months. Relative to historic performance, the Sacramento program's retention rate after five years proved to be a success, especially given the reliance on one staff member, part-time employees, and unpaid interns.

Funding

For the first two years, the program and staff were partially funded by the State of California through the states Preventive Health and Health Services Block Grant from the CDC. Then the program was funded under a three-year grant from The California Wellness Foundation. The City of Sacramento absorbed residual expenses and used unpaid interns as recreation aides to minimize cost. The city continued to support the walking groups through internal resources.

Future Plans: Increasing Fitness Across Generations

City staff will expand "Neighborhood Walk" into an inter-generational walking program, an idea that originated in the walking groups. Although the groups were originally designed for those 50 years and older, a range of walkers joined the groups. Creating intergenerational groups has had several benefits:

- · Promoting physical activity across the lifespan
- Helping older adults feel less threatened by youth in the neighborhood, a possible barrier to walking
- Expanding social networks through interaction between neighbors of different ages
- · Reducing social isolation felt by some residents
- · Helping make physical activity a social norm

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END NOTES:

- 1. UCLA Center for Health Policy Research. Ask CHIS: Adults who walked for transportation, fun or exercise, 2009. <u>www.healthpolicy.ucla.edu/Pages/home.aspx</u>
- U.S. Department of Health and Human Services, "2008 Physical Activity Guidelines for Americans." pp 1–6 <u>www.health.gov/paguidelines/pdf/paguide.pdf</u>
- 3. Brown, David R., Gregory Heath, and Sarah Levin. Martin, "Promoting Physical Activity: A Guide for Community Action." Champaign, IL: Human Kinetics, 2010. vol. 1, pp 3–42
- U. S. Department of Health and Human Services, "2008 Physical Activity Guidelines for Americans." pp 1–6 <u>www.health.gov/paguidelines/pdf/paguide.pdf</u>
- Centers for Disease Control and Prevention, "Physical Activity and Health, the Benefits of Physical Activity." Division of Physical Activity, Nutrition and Obesity, June 4, 2015 <u>www.cdc.gov/physicalactivity/basics/pa-health/index.htm</u>
- Centers for Disease Control and Prevention, Division of Nutrition, Physical activity and Obesity, Physical Activity and Health, "the Benefits of Physical Activity", June 4, 2015 <u>www.cdc.gov/physicalactivity/basics/pa-health/index.htm</u>

OTHER REFERENCES

- 1. Kohl, Harold W., and Tinker Dan Murray, "Foundations of Physical Activity and Public Health." Champaign, IL: Human Kinetics, 2012.
- 2. Brown, David R., Gregory Heath, and Sarah Levin Martin, "Promoting Physical Activity: A Guide for Community Action." Champaign, IL: Human Kinetics, 2010.
- 3. U.S. Department of Health and Human Service, "2002 Physical Activity Evaluation Handbook." Atlanta, GA: U.S. Department of Health and Human Services, Center for Disease Control and Prevention. <u>www.cdc.gov/nccdphp/dnpa/physical/handbook/pdf/handbook.pdf</u>
- 4. Fenton, Mark, "The Complete Guide to Walking for Health, Weight Loss, and Fitness."

Section 6 Physical Activity in Community Settings, Access to Parks and Recreational Opportunities







Physical Activity in Community Settings, Access to Parks and Recreational Opportunities

CCORDING TO THE CDC, during the period from 1980–2008, obesity rates doubled for adults and tripled for children. During the past several decades, obesity rates for all population groups-regardless of age, sex, race, ethnicity, socioeconomic status, education level, or geographic region have increased markedly (1). Overweight and obesity result from an energy imbalance. This involves eating too many calories and not performing enough physical activity. Behavior and environment play a large role in causing people to be overweight and obese. These are the greatest areas to initiate prevention and treatment actions (2). Recent estimates are that about 50 percent of women and more than 40 percent of men in the U.S. are sedentary (3). The epidemics of chronic conditions such as diabetes, high blood pressure, asthma and others that result from an indoor, sedentary lifestyle require action



from all sectors of society. Parks and public lands are underutilized, low-cost healthcare resources that can and should be used to help solve the obesity problem.

Partnership is the key to successful health programming in parks. Whether programming involves working with youth, schools, senior groups or others, park partnerships can extend the programming reach and resources well beyond an organization's current capacity. There are many types of parks and therefore various partnerships opportunities. The types of partnerships that work best for programming depends on factors such as the availability of transportation, the desired program elements and a park's offerings etc. As with any effective partnership, each partner can contribute to a project's success. So, while city and county parks and recreation departments can bring many important resources to the table, the expertise and knowledge of public health professionals are critical to program success (4).

The Role of Local Health Departments (LHD)

The LHDs can play a key role to increase successful health programming in parks in many ways. LHDs can:

- Take the lead in identifying the major health challenges to be addressed in local communities.
- Serve as the organizer of key park and recreation program partners such as state, regional and national parks, city planners and active transportation professionals.
- Collaborate with physical activity professionals to provide resources and technical assistance.
- Facilitate partnerships with schools and community based organizations with a health focus.

 Announce a "Call to Action" targeting public health officials, as well as local, state and national park officials in the immediate area.

As with physical activity planning in other sectors, creating effective parks and recreational PA programs first involves identifying and recruiting a Health Leadership Team or PA Health Champion. Once the team is recruited and oriented, they can begin to engage in the process of physical activity programming. The team should follow the four essential steps outlined in the introduction:

Assess, Plan, Implement, and Evaluate (see Section 1 Introduction: <u>Designing a Physical</u> Activity Intervention).

Step 1: Assess

Park environments provide important venues for adults, youth and children to be physically active. A park assessment will help determine the current status of the park and what is needed in the community to access guality park and recreation PA opportunities. For a better understanding of what attracts and encourages people to use parks and park-like settings a reliable method for auditing park environments should be used. At the same time, developing activity-friendly neighborhoods, including better parks, requires support from multiple constituencies, including those not directly responsible for parks or promoting PA. This can be accomplished by involving representatives from diverse groups in evaluating, advocating for, and promoting improved accessibility and design of community parks and open spaces. Example items to include in an assessment:

- Document and categorize the amount and type of physical activity that occurs in parks, including their intensity (sedentary, moderate, or strenuous) duration and frequency. Determine if frequent use is seasonal or consistent.
- Examine the level of physical activity that occurs in different areas of the park's environments.
- Determine if use conflicts exist (e.g. are hiking trails shared or also used by mountain bike riders and/ or riders on horseback), which may lead to right of way issues.

- Verify if the park's operating hours are suitable for users.
- Determine whether the park's quality associated with specific physical activity participation is appropriate for use among children and adults.
- Verify if the context of the surrounding neighborhood (safety, connectivity, aesthetics, etc.) affects physical activity participation and park use among children and adults.
- Determine if there is ample parking for those who drive to the park.
- Verify proper access to all facilities (pools, restrooms, play equipment, picnic tables) and other features for handicapped individuals?
- Does the park incorporate "Universal Design" (environments that are accessible to older people, people with disabilities or physically challenged).
- Verify the park users' perspectives

 (e.g., motivations, constraints, visitation patterns, use behaviors, important site characteristics) in the role of the park's facilities in their physical activities.



Assessments: Best Practices

The following sample assessments are based on <u>best practices</u> and help provide a snapshot of a park's current conditions, assist with developing a plan of action to address areas of improvement and can serve as a post assessment to capture any changes being implemented.

• Toolbox for Community Educators, PA Community Assessment

This resource provides assistance for community educators in teaching low-income adults how to increase their fruit and vegetable consumption and physical activity. The Toolbox consists of both a hard copy and an online guide created to assist community educators in leading lessons in nutrition education, physical activity, and community empowerment with groups of lowincome adults. The Toolbox includes adaptable lesson plans with supporting handouts, videos, CDs, and evaluation tools and is available in Spanish and English.

http://www.network-toolbox.cdph.ca.gov/en/ index.html

Community Park Audit Tool (CPAT)

This audit tool enables diverse community stakeholders to audit local parks for their potential to promote physical activity. The tool is userfriendly and focuses on youth physical activity. www.activelivingresearch.org/community-parkaudit-tool-cpat

Recreation Facility Evaluation Tool

This instrument can be used to identify and evaluate parks, playgrounds, sport fields, aquatic facilities/pools and recreation centers. Each park and recreation center can be rated with respect to safety, condition, and maintenance of the facility. Be aware this evaluation tool was developed for facilities in a medium-sized county (population 104,237) in the southeastern United States. http://prevention.sph.sc.edu/tools/docs/ documents_recfacility.pdf

California Law for Playgrounds (safety actions, rules, and code)

Per California Health and Safety Code (Section 115725–115735) all new playgrounds open to the public built by a public agency or any other entity shall conform to the playground-related standards listed in the American Society for Testing and Materials and the playground-related guidelines from the United States Consumer Product Safety Commission. These regulations also apply to the replacement or modification of existing equipment. Links to the law and the California Parks and Recreation Society can be found at the CDPH Playground Safety web-page.

www.search-california-law.com/research/section/ ca/HSC/44.11.4.1/index.html

The BRAT-Direct Observation (BRAT-DO)
 This is a paper-and-pencil instrument used to visually identify and evaluate the physical characteristics of parks, including safety, condition and maintenance. It is very detailed and comprehensive. The website includes a manual, training presentation and training exercises.

 www.activelivingresearch.org/brat-direct-observation-brat-do

Step 2: Plan

Many of the assessments listed above have tools and recommendations to assist with planning. Findings from the park assessment will drive the planning process. An action plan should be created based on the needs identified in the park assessment and include strategies to increase access, opportunities and the quality of PA at parks. The results of the park assessment should include the current issues, status of the issues, resources available to address the issues, individuals, coalitions, and organizations that have a stake in the issues, any barriers that may exist and other pertinent information.

This point in the program is a good time to review the <u>RE-AIM</u> planning process to keep the implementation focused. The leadership team can then complete the <u>logic model</u> used to address the identified problems and achieve the desired program outcomes. The logic model acts as a visual road map to guide the implementation process. A well written logic model will include; a program goal or outcome, the current situation or status of the stated problems, resources available to address the problems, individuals and groups to be involved in the plan, barriers to program success and other related information. The leadership team will then discuss and create <u>SMART objectives</u> with associated activities to address the problems and obtain the desired outcomes and overall goal. Below are planning strategies and tools to assist in the planning process.

- The National Physical Activity Plan The plan has six strategies to incorporate increasing the amount of PA within parks. www.physicalactivityplan.org/
- The USDA SNAP-Ed Strategies and Interventions Toolkit for States

This site provides evidence-based interventions and strategies to increase PA opportunities at the community level. <u>www.nccor.org/downloads/</u> <u>SNAP-EdInterventionsToolkit.pdf</u>



Parks Prescription

Park Prescriptions is a movement to create a healthier population by strengthening the connection between healthcare and public land use by increasing the prescription of outdoor PA to prevent (or treat) health problems resulting from inactivity and poor diet. Park Prescriptions will allow visitors to public lands to increase their time spent enjoying PA and provide physicians/ healthcare providers with tools to inspire patients to improve their health. <u>www.parkrx.org/</u>

 National Recreation and Parks Association (NRPA) and CDC's Park Prescription Initiative

This is a compilation of success stories from organizations that implemented the Park Prescription program. The report provides insight and ideas that can be easily replicated. www.nrpa.org/success-stories/

Step 3: Implement

During program implementation, include steps for how the program will roll out. Refer back to the RE-AIM process plan that was developed for an overview and consider which program partners may be best suited for specific tasks, or if need be seek out additional partners with specific skills, such as marketing (local newspaper, radio or television station). Identify evidence-based and best-practices programs and curriculum resources, policy, systems and environmental change opportunities, skillsbased training if needed and other resources. If you developed a logic model for program implementation, review it for key points and the desired outcomes you want. Assign implementation tasks to partners with related skills and expertise to the tasks. Consider improving the quality and quantity of PA by implementing strategies that create partnerships involving youth serving and other community organizations. Also, recruit local, state and/or national parks, faith based organizations and other stake holders onto your team.

RESOURCES/CURRICULA

 Parks and Recreation: 5 Key Trends in Parks and Public Health, Parks & Prescription.
 This site contains information on the five trends occurring in parks across the United States that



are related to PA. It also provides success stories on program implementation. <u>www.nrpa.org/</u> <u>parks-recreation-magazine/2012/november/5-key-</u> <u>trends-in-parks-and-public-health/</u>

• The Strategic Alliance for Healthy Food and Activity Environments

This site's resources help local advocates maintain and develop physical activity programs and facilities in their communities. Resources include information on best-practices, the ENACT Local Policy Database, media advocacy tools, and steps for advancing local policy.

www.eatbettermovemore.org/sa/enact/members/ index.php

 Center for City Park Excellence: The Trust for Public Land

This site share examples of how public health can partner with parks and recreation for programing. www.cityparksblog.org/category/health/

Rails to Trails Conservancy

This site provides numerous resources that address active transport and walking/biking infrastructure in various settings. <u>www.railstotrails.org/</u>

 Urban River Parkways: An Essential Tool for Public Health

This report from the UCLA School of Public Health investigates the influence urban river parkways have on improving community health. <u>https://ehs.ph.ucla.edu/news/item?item_id=8764</u>

All Communities Deserve Safe Places To Play And Be Active (Prevention Institute/ Active Alliance)

This document offers a four point plan to make PA, safe play environments, active transportation and quality PA/P.E. activities a priority in California. www.preventioninstitute.org/publications/allcommunities-deserve-safe-places-to-play-andbe-active

Advocates for Youth (Community Mobilization)

This document summarizes 14 key strategies that are based on best practices in community mobilization, collaborative partnerships and coalition-building. Many of these strategies overlap with best practices for engaging key stakeholders and best practices for working in diverse communities. Based in Teen Pregnancy prevention, many techniques and strategies discussed are easily used in PA related issues. www.advocatesforyouth.org/publications/ publications-a-z/2398-strategies-guided-by-bestpractice-for-community-mobilization

• Community Leader/Partnerships: Trailnet's Healthy, Active, & Vibrant Communities Initiative (HAVC)

This site provides a model that uses community engagement and community development principles to empower communities to support and promote healthy eating and active lifestyles. The intent of this intervention is to build a communities' capacity to implement policy and environmental changes and build healthy social networks to address obesity.

www.centertrt.org/?p=intervention&id=1104



YOUTH ENGAGEMENT

Seeking out youth to participate in PA programming has many benefits such as, instruction of the importance of PA throughout a lifetime, adoption of physically active behaviors, mentoring youth through active lifestyles, responsibility and others. The resources below provide details on methods and techniques to gain youth participation.

Engaging Youth in Partnership: A Resource Document for Youth Serving Agencies and Programs

This document identifies best practice techniques and national programs for youth engagement. www.smhp.psych.ucla.edu/pdfdocs/niiah/ niiahyouthengagementresources.pdf

 4-H Youth development and Work-based program

This site provides promising practices and other hints on working with City Government and City Parks and Recreation Departments. www.urban4hscience.rutgers.edu/

YMCAs

The "YMCA" offers PA programs for youth, families and adults. <u>www.ymca.net/</u>

POTENTIAL PARTNERS

The Trust for Public Land

This site provides information on the use of conservation financing and research and education to conserve land for people to enjoy as parks, community gardens and play spaces. www.tpl.org/#sm.000f7ho2ep9ude 811m82654bbl646_

American Hiking Society

This organization provides information on the promotion and protection of foot trails, their surrounding natural areas, and the hiking experience through advocacy and policy. They also support local trail development days and outdoor safety. www.americanhiking.org/



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National Recreation and Park Association (NRPA) affiliates

This site provides a nationwide list of societies and associations for groups affiliated with NRPA and representing park and recreation professionals. www.nrpa.org/About-National-Recreation-and-Park-Association/state-and-national-affiliates/

 San Francisco Area Resources Parks / Trails— East Bay Regional Park District

This is a website resource for all the park activities in Alameda County and the East Bay area of Oakland, California. It provides a calendar of PA and non-PA events and activities, status of trails and park facilities. <u>www.ebparks.org/parks</u>

• Parks in the San Francisco Bay Area – Bay Area Kid Fun

This site provides information on parks with facilities designed specifically for family fun, including playgrounds, paved walking paths, boat rentals, train rides, and carousels. www.bayareakidfun.com/

Healthy Parks Healthy People

The National Park Service offers advice, technical assistance, recognition, and grants to help communities across the country preserve their own history and create close-to-home recreation opportunities. The National Park Service can help local districts designate historic landmarks conserve rivers and open spaces.

California State Parks Office of Community Involvement

The Office of Community Involvement (OCI) is the bridge that connects people to parks. Their mission is to promote the means and facilitate the methods by which California State Parks' services, facilities and parks become meaningful and relevant to all Californians. The OCI develops and implements programs that increase services to non-traditional park users and under-served communities. www.parks.ca.gov/?page_id=24510

• KaBOOM!

KaBoom is a national non-profit that empowers communities to build playgrounds and play spaces for youth. KaBOOM! focus on creating great places to play while activating community leaders, all with the goal of improving the health of children and the health of communities. <u>www.kaboom.org/</u>

Adopt a Park Organizations

Adopt a Park programs usually assist in protecting and enhancing city, county or state parks and open spaces by ongoing volunteer support and special events. Programs help with facility maintenance and fundraising. These programs also help to educate public policy makers and local organizations in the important role parks and open spaces serve in their respected communities. Adopt a park organizations can be found in each city and county in California. Conduct an on-line search for a park in your area you would like to support.

Step 4: Evaluate

Evaluation should always be considered in the planning stage of the PA program. Refer to the RE-AIM process to identify key points of the implementation process that are good for status check (also called process evaluation). Look at program components such as, is the program reaching the individuals in most need? Is the program achieving the projected short term and long term outcomes? What parts of the program are flexible to increase efficiency? Use the logic model you created to assess the SMART Objectives that were created. Has there been an increase in knowledge among participants, have participants learned new skills? Are the new skills leading to a change in behaviors, using the park more? Have there been improvements to the park's physical environment? Outcome and impact evaluation will determine the overall success of the program. Outcome will determine the results of the specific objectives from the logic models. Impact evaluation will project the long term results of the program. The tools identified in the "Assess" section can be used to re-asses a park's overall PA environment on a

pre and post basis before and after the intervention. To evaluate components of the intervention more specifically, there are assessment tools in the "Plan" section which can be used to assess specific areas of a park that may have been subject for improvement. The resources below can help in your evaluation.

Recreation Facility Evaluation Tool

This instrument can be used to identify and evaluate parks, playgrounds, sports fields, aquatic facilities/pools and recreation centers. Each facility can be rated with respect to safety, condition and maintenance. <u>www.prevention.sph.sc.edu/tools/</u>

• The BRAT-Direct Observation (BRAT-DO)

The BRAT-DO is a paper-and-pencil instrument used to visually identify and evaluate the physical characteristics of a park's safety, condition and maintenance. It is very detailed and comprehensive. The website includes a manual, training presentation and training exercises. www.publichealth.lsuhsc.edu/faculty_pages/rung/ index_files/page0004.htm

 The Environmental Assessment of Public Recreation Spaces (EAPRS) Tool

This instrument provides a comprehensive direct observation assessment of the park's physical environments with an emphasis on evaluating the physical elements and qualities with respect to their functionality or potential functionality (e.g., how a park or playground element is used or could be used by adults and children). It includes more "nature" elements like trails, beaches and streams not found in other evaluation instruments. The site also includes an instruction manual and photos to help with scoring.

www.activelivingresearch.org/environmentalassessment-public-recreation-spaces-eaprs-tool

• The Parks and Recreation Areas Self-Report Survey

This tool is survey developed to capture the presence and condition of features and amenities in a park environment frequently visited by local residents. www.activelivingresearch.org/ parks-and-recreation-areas-self-report-survey

• The Rural Active Living Assessment (RALA) Tools

The evidence-informed RALA tools were developed using substantial input from rural residents. The RALA includes three separate components: 1) Town-Wide, 2) Community Programs and Policies and 3) Street Segment Assessments. These three assessment instruments are designed to be used together to provide a comprehensive measurement addressing many of the unique factors believed to be important to active living in rural communities. They were designed to balance user-friendliness with reliable measures. The accompanying RALA Codebook provides users with a practical and simple guide for implementing the tool in rural communities across the U.S.

www.activelivingresearch.org/rural-active-livingassessment-rala-tools

Park Success Story

KIDS in PARKS PROGRAM Intent of the Intervention

The Kids in Parks (KIP) program's focus is to increase the use of existing trail systems in local, regional, state and national parks by making trail systems youth friendly and incorporating and promoting physical activity through hiking, disc golf and other outdoor activities. The program rewards youth for continued participation with incentives. The KIP program is a practice-tested intervention. It is also a self-contained, packaged program (a trailhead sign, self-guided brochures and web site) available at low-cost to community partners with pre-existing hiking trails.

STEP 1: ASSESS

A community advisory committee in Ashville North Carolina noticed obesity trends in local school age children were rising. The group, made up of local stake holders included a pediatrician, an attorney, a few business owners, a local bank representative and local and national park representatives. After reviewing an assessment of the nearby Blue Ridge Parkway National Park, the group noticed park use by youth under 15 years of age had decreased significantly over the past several years. The group



decided to launch an "unplugged" campaign to get kids and teens away from electronic devices and increase the amount of daily PA. The PA would be channeled to occur in local parks.

STEP 2: PLAN

Review of Strategies

As the park settings were the designated places to have PA occur, the advisory community decided on an informational outreach type of strategy to reach its designated population. The *Guide to Community Preventive Services* (Obesity: Behavioral Interventions that Aim to Reduce Recreational Sedentary Screen Time Among Children), was used as a planning aide, according to the Guide, "creation of or enhanced access to places for physical activity combined with informational outreach activities" is an evidence-based strategy to increase physical activity.

The advisory committee, based in Ashville North Carolina, solicited additional members and grew into the "Kids in Parks" (KIP) advisory committee. The committee decided to focus their effort to increase the amount of PA among school age children and teens in the Ashville area of the Blue Ridge Parkway National Park as it was close by, accessible for families with school age children and was experiencing low visitation numbers. As funding was needed, the KIP committee applied for and received a grant from the Blue Shield, Blue Cross Foundation of North Carolina to fund the initial effort. The KIP advisory committee plan included:

- **Intended population:** Geared toward children and teens.
- Activities: Discovery Nature Trails for children; featuring scavenger hunts and backyard adventure games with Disc Golf Courses for teens.
- **Setting:** Parks located on lands under all types of jurisdictions: national, state, city/county, private, tribal.
- **Incentives:** Trail users are to register their hikes, making them eligible to receive prizes and join the online Trail TRACKer Team. The more hikes a youth tracks on the KIP website, the better the prizes.

• **Evaluation:** To collect participation data, kids and teens would have to answer survey questions about their adventure, their likes and dislikes, who they were with, date and time of visit, etc. on the KIP website.

STEP 3: IMPLEMENT

Additional Partnerships

To implement the KIP program on the ground, additional partners were needed to make the program work in the different trail localities (North Carolina, Virginia). The KIP partnerships included:

- Federal Land Management Agencies
 - * National Park Service
- * The US Forest Service
- * The Army Corps of Engineers
- · State land management agencies
- * State park systems (NC, VA)
- · City and county land management agencies
- * City and county Parks and Recreation Departments
- * School systems
- Other Nations
- * Eastern Band of Cherokee Indians
- Private Land Owners
- * Two trails are located on private land

Resources

Program partners assisted the KIP staff in trail selection at each public land site, in the development of the brochure-led adventures, with the installation of the trailhead signage and with the ongoing maintenance of the trail and trailhead site. The KIP program provides the following materials to participating partners: park assessment tool, trailhead sign and trail kiosk, brochures regarding the type of trail and trail activities, a website page, data collection and prizes for participants.

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The KIP website has two main purposes:

- To incentivize physical activity behavior trail users register their hikes, making them eligible to receive prizes and join the online Trail TRACKer Team. The KIP program mails out prizes.
- To receive their prizes kids have to answer 12–15 questions about their adventure, their likes and dislikes, who they were with and the date and time of visit. KIP shares this information with its partners and uses it to evaluate the program.

STEP 4: EVALUATE

The KIP program focused on increasing the appeal of existing parks to kids and their families. The KIP program potentially increases outdoor physical activity. With an increase in outdoor activity, KIP programs indirectly targeted decreasing screen time among children and teens.

Process Evaluation

Process evaluation is ongoing in the Kids in Parks program. User data are continually collected on the website about trail use as well as limited demographic information. This data is compiled and sent back to the local TRACK Trail manager. Using the online data from approximately 600 registered users, over 40% stated that they came to the park specifically to hike the TRACK trails, 60% reported never having been to the park before and 25% had never been hiking before their hike on a TRACK Trail.

Outcome Evaluation

One of the outcome goals of KIP program is to modify and increase the appeal of existing parks with hiking trails to children and their families. There are eleven state with Track Trails programs, website tracking, and incentive program and a system of criteria for developing new trail sites. A secondary outcome goal is to increase outdoor physical activity and indirectly decrease screen time among children and teens. Because information on baseline physical activity of users is not reported, it is difficult to assess this behavior change.

• For a description of the Kids in parks program please visit <u>www.kidsinparks.com/</u>.



END NOTES

- Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, "Obesity: Halting the Epidemic by Making Health Easier", January 2012 <u>www.cdc.gov/pcd/issues/2012/10_0292.htm</u>
- Centers for Disease Control and Prevention, "Causes and Consequences What Really Causes Overweight and Obesity", April 27, 2012; as Adapted from U.S. Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity, 2001 www.nichd.nih.gov/health/topics/obesity/conditioninfo/pages/cause.aspx
- Ladabaum U, Mannalithara A, Myer PA, Singh G. "Obesity, Abdominal Obesity, Physical Activity, and Caloric Intake in U.S. Adults", 1988–2010. Am J Med. 2014 Mar 10. pii: S0002-9343(14)00191-0. doi: 10.1016/j.amjmed.2014.02.026. [Epub ahead of print. www.amjmed.com/article/S0002-9343(14)00191-0/pdf
- 4. Brown, David R., Gregory Heath, and Sarah Levin. Martin. "*Promoting Physical Activity*": *A Guide for Community Action.* Champaign, IL: Human Kinetics, 2010. no.6 pp. 119–136

OTHER REFERENCES

- 1. Brown, David R., Gregory Heath, and Sarah Levin. Martin, "Promoting Physical Activity: A Guide for Community Action." Champaign, IL: Human Kinetics, 2010
- 2. Kohl, Harold W., and Tinker Dan Murray, *"Foundations of Physical Activity and Public Health."* Champaign, IL: Human Kinetics, 2012.
- National Parks and Recreation Association, "Parks and Recreation in Underserved Areas: A Public Health Perspective." Ashburn Virginia <u>www.lchc.org/wp-content/uploads/02_LCHC_ParksRec.pdf</u>
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, "2002 Physical Activity Evaluation Handbook." Atlanta, GA. 2002 www.cdc.gov/nccdphp/dnpa/physical/handbook/pdf/handbook 508.pdf





Section 7 Older Adults (age 60 and above) and Physical Activity



Older Adults (age 60 and above) and Physical Activity

Benefits of Physical Activity and Exercise

HYSICAL ACTIVITY and exercise are beneficial for people of all ages. Physical activity helps boost a person's energy level, improves a person's mood, helps people manage weight and most chronic diseases like diabetes, high blood pressure, arthritis or chronic obstructive pulmonary disease. Other benefits of physical activity include improved flexibility, improved balance (reducing the risk of falls) increased endurance, and maintains bone and muscle strength. Physical activity and exercise may lower the risk of Alzheimer's disease and loss of cognitive brain function (1). The less active we are, the more we lose our flexibility and ability to reach, bend, twist, lift and eventually walk. These movements are associated with our activities of daily living (ADL). The basic ADLs include eating, bathing, dressing, using the toilet independently and walking independently. Functional ADL is/are the ability to complete daily tasks, light house work, and ability to drive or use transportation, carry groceries and similar chores. When older adults begin to lose the ability to perform their ADL, is when they begin to lose their independence.

Physical activity and exercise benefits people throughout their lifetime. The <u>physical activity</u> <u>guidelines</u> from the CDC, recommends for seniors, to be physically active at least 150 minutes (2 hours and 30 minutes) a week. The good news is even older adults can stay fit by increasing the level and amount of physical activity and exercising they do. Physical activity and exercise encourages the body to produce new cells, increase bone density and maintain muscle mass. It is never too late to start an exercise program to improve one's health.

There are many reasons older adults avoid exercise; some are a perceived risk of injury, falling, increased pain and stiffness, not knowing the benefits of physical activity and a negative mind set are also factors. The actual danger is not exercising and becoming sedentary.

Some physical activity is better than none at all. Older adults who participate in any amount of physical activity will gain some health benefits. If people are afraid of getting hurt, encourage activities they feel comfortable with and or activities they did when they were younger and are familiar with. Urge them to do these activities at a lower level of intensity. Choose low impact activities such as walking, swimming, water aerobics, tai-chi or riding a stationary bike to initiate activity. Each of these activities can also be done individually or in a group situation with supervision if an individual feels they need support and feedback.

If a person hasn't done any physical activity for an extended period, they will be sore when they start doing any exercise program; this is true for individuals at any age. As the body becomes familiar with the new activities the soreness will go away.



French cyclist Robert Marchand, 105 years old, setting a record for distance cycled in one hour, (14 miles) January 4, 2017.

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The fact is, most people can be physically active if they want to be. The key for anyone, including older adults, is to see their primary care doctor before starting any exercise program, ask for their advice and do activities within their ability level. Additional guidelines from the CDC are:

- Older adults should determine their level of effort for physical activity relative to their level of fitness and increase gradually.
- When older adults cannot do 150 minutes of moderate-intensity activity a week because of limitations, they should be as physically active as their abilities allow.
- Older adults should do exercises that maintain or improve balance if they are at risk of falling.
- Older adults with chronic health conditions should understand whether and how their conditions affect their ability to do regular physical activity safely.



How Much Physical Activity do Older Adults Need?

Anyone starting a physical activity or exercise program should consult their physician before beginning. Surprisingly, the recommendations for healthy older adults are not different than the recommendations for adults ages 18 to 64. According to the CDC, older adults should aim to do at least 150 minutes (2 hours and 30 minutes) of moderate-intensity aerobic physical activity a week or 75 minutes (1 hour and 15 minutes) of vigorousintensity aerobic physical activity per week.

- **Moderate-intensity activity** requires a medium level of effort. On a scale of 0 to 10, where sitting at rest is 0 and the greatest effort possible is 10, moderate-intensity activity is a 5 or 6 and produces noticeable increases in breathing rate and heart rate over the resting heart rate.
- **Vigorous-intensity activity** is a 7 or 8 on the same scale and results in large increases in a person's breathing rate, breathing volume and their heart rate.

A moderate level of aerobic physical activity will increase a person's heart rate about 50 beats per minute (heart rates will vary among individuals) compared to when they are at rest. Remember, all activities should be done at the individual's comfort level. Moderate aerobic physical activity includes activities such as:

- Walking the dog
- Riding a bike on a level surface less than 10 miles an hour (always wear a helmet when riding a bicycle)
- Playing golf (walking without a cart)
- Yoga
- Tai-Chi
- Playing catch with grand children

Vigorous (fast pace) physical aerobic activity is for older adults who may be in better physical condition. Older adults who wish to choose the vigorous activity option should do 75 minutes (1 hour and 15 minutes), of a vigorous aerobic physical activity a week. A vigorous (fast paced) level of physical activity will increase a person's heart rate about 65 to 70 beats more a minute than when they are at rest (heart rates will vary per individual). Examples of vigorous level activities include:

- Riding a bike faster than 10 miles an hour (always wear a helmet when riding a bicycle)
- Team soccer
- Jogging faster than 5 miles an hour
- Zumba dance class
- Swimming dedicated laps in a pool or water aerobics
- · Playing a full court basketball game

Aerobic physical activity should be spread throughout the week. Research studies consistently show activity performed at least three days a week produces positive health benefits. Spreading physical activity across three days a week may help to reduce the risk of injury and avoid excessive fatigue.

In addition to aerobic activity, the CDC recommends seniors do muscle strengthening two or more days a week. For adults 65 years of age and older who are generally fit and have few to no physical limitations, weight bearing activities are the best thing to keep bones and muscles strong. Activities that engage all major muscle groups; arms, shoulders, back, chest, abdomen, hips and legs should be performed. Some activities will be aerobic and strengthen muscles at the same time. Muscle strengthening activities can include:

- Hiking
- Weight lifting to ability level
- Jogging
- Resistance bands
- Swimming
- Bike riding uphill (always wear a helmet when riding a bicycle)

Of course the more time a person spends doing any physical activity the greater the health benefits. This includes people 60 and over.

Overcoming Barriers

As with anything new, people may be hesitant to join in a program. Follow these tips to help increase participation with a program for older adults:

 Advertise your program: spreading the word around the community about the program is extremely important. The more participants you have the more likely it is your program will be successful. Use ads in newspapers, flyers and ask for support from the facility where the program will be held. City parks and recreation, community centers and or churches usually have existing advertising; ask to have the program be placed in with newsletters, bulletins, websites and emails.

- Include a social aspect to your program: people are more willing to participate if they see friends and familiar faces in a group setting. Social time is important for older adults as many may feel somewhat isolated.
- Solicit for a sponsor: a sponsor for a program can have many benefits; they can help with advertising provide equipment, t-shirts and even healthy snacks.
- Use an approved/<u>evidence based curriculum</u>: this is key as approved programs fit SNAP-Ed requirements and usually lead to positive results.
- Be sure the selected instructor is certified or trained in the specific curriculum or program that will be used.

Selecting Curriculum and Programs for Older Adults

When selecting and implementing a physical activity program specifically for older adults be sure it is flexible to accommodate all participants' ability levels or that participants are able to adapt or adjust activities to accommodate any personal limitations. The "Moving Ahead" guide from the CDC is a planning tool that can help an agency plan out effective physical activity programing for seniors.



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Evidence Based Physical Activity Programs for Older Adults

Criteria for SNAP-Ed programing requires curricula to be "Research-tested", "Practice-tested", or "Emerging", see <u>Appendix E</u> for definitions. "Evidence-Based" curricula are usually researchtested meeting the most stringent criteria and result in overall better programing. Please review any training criteria needed for curricula implementation. The following curricula are examples of evidencebased physical activity curricula for Older Adults:

California SNAP-Ed Curricula list

All curricula on the California SNAP-Ed Integrated Curricula List are available for use (as appropriate) by any Local Implementing Agency (LIA), except curricula listed in the Pilot tab.

www.cdph.ca.gov/Programs/CCDPHP/DCDIC/ NEOPB/Pages/SNAPEdResources.aspx

 California Department of Aging (CDA) CDA has compiled a comprehensive list of evidence-based programing for older adults. This list provides resources for physical activity curricula and chronic disease management. It is found on the CDA Disease Prevention and Health Program page on the CDA website. Please note, not all evidence-based criteria meets SNAP-Ed curriculum requirements. For more information consult with your assigned Project Officer.

National Council on Aging

The National Council on Aging (NCOA) assists people age 60+ meet the challenges of aging. They partner with nonprofit organizations, government, and business to provide community programs and services. They provide a wide variety of summaries to diverse evidencebased physical activity curricula focused on fall prevention and general fitness. However, not all programs will meet SNAP-Ed criteria. www.ncoa.org/healthy-aging/

Arthritis Foundation

The Arthritis Foundation, a National Non-profit, offers both evidence-based and other programs for individuals with arthritis. The Research-tested "Walk with Ease" program can be done in a community group setting or on an individual basis. The Arthritis Foundation also sponsors aquatic programs, Zumba classes and other group physical activity programs. There are local offices throughout California. Call a local office to get specific information on programing and services. www.arthritis.org/california/

• YMCA

Moving for Better Balance program is a 12 week evidence-based, instructor-led group program designed to improve strength, mobility, flexibility and balance for better function in the activities of daily living. Contact a local YMCA for details about the Moving for Better Balance and other programs for seniors. www.ymca.net/

Enhance Fitness

Enhance Fitness is a low-cost, evidence-based group exercise program, that helps older adults at all levels of fitness become more empowered to sustain independent lives. Classes are typically an hour long and focus on dynamic cardiovascular exercise, strength training, balance, and flexibility. Look to see where classes are offered in your area. www.projectenhance.org/EnhanceFitness.aspx

• Fit and Strong

Fit & Strong! is a low-cost, evidence-based, multiple component exercise program. It combines flexibility, strength training and aerobic walking with health education for sustained behavior change among older adults with lower extremity osteoarthritis. www.cdph.ca.gov/Programs/CCDPHP/DCDIC/ NEOPB/Pages/SNAPEdResources.aspx

• A Matter of Balance

This program is practice –tested and designed to reduce the fear of falling and increase activity levels among older adults. <u>www.mainehealth.org/healthy-</u> communities/healthy-aging/matter-of-balance

• Staying Healthy Through Education and Prevention (STEP)

The STEP program is an evidence-based exercise program focusing on moderate level cardiovascular physical activity and strength training for seniors. www.ahrq.gov/professionals/education/curriculum-tools/stepmanual/index.html

Other Activity Resources for Older Adults

Aquatic Exercise Association (AEA)

The AEA is a nonprofit organization committed to the advancement of aquatic fitness, health and wellness worldwide. The AEA is an internationally recognized organization of aquatic fitness education for professionals conducting aquatic exercise programs in association with the Arthritis Foundation, YMCA and similar organizations. www.aeawave.com/

• GO4Life

This program is from the National Institute on Aging at the National Institutes of Health. It is a web based program targeting seniors and designed around four types of exercises; Endurance, Strength, Balance and Flexibility. Each component is self-paced with the participant receiving tips as they move through the program. It also contains a nutrition component. <u>www.go4life.nia.nih.gov/get-started</u>

Mall Walking

The Mall Walking program manual from the CDC is for community stake holders who want to partner with their community mall to either start a walking program, or use an existing program to increase their community member's activity level by walking. www.cdc.gov/physicalactivity/downloads/ mallwalking-guide.pdf

SilverSneakers

SilverSneakers is a benefit for seniors of some insurance plans that offer gym memberships for free. Most gym amenities and programs are included with SilverSneakers membership. People can contact their local gyms or insurance companies for eligibility and program information. www.silversneakers.com/

REFERENCES:

- 1. The Search for Alzheimer's Prevention Strategies, National Institute on Aging, September 2012 www.nia.nih.gov/health/assessing-risk-alzheimers-disease
- 2. Photo NPR http://www.npr.org/sections/thetwo-way/2017/01/04/508213332/105-year-old-cyclist-rides-14-miles-in-an-hour-en-route-to-a-world-record
- 3. American Academy of Pediatrics, Infant Physical Activity; <u>www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/HALF-Implementation-Guide/Age-</u> <u>Specific-Content/Pages/Infant-Physical-Acticity.aspx</u>
- 4. National Association for Sports and Physical Education, "Active Start- Physical Activity Guidelines for Children From Birth to Age 5" July 2011 www.journal.naeyc.org/btj/200605/NASPEGuidelinesBTJ.pdf
- 5. Center for Disease Control and Prevention, 2008 Physical Activity Guidelines for Americans. <u>www.cdc.gov/physicalactivity/basics/</u>



Section 8 Physical Activity for Individuals with Physical Limitations Programs or Disabilities







Physical Activity for Individuals with Physical Limitations or Disabilities

DISABILITY is any condition of the body or mind that makes it more difficult for a person with the condition to perform routine activities of daily living and interact and or function with the world around them. There are many types of disabilities. According to the U.S. Census Bureau, an estimated 24.1 million people or 17.5% of the U.S. population has a functional limitation (1). According to the CDC, whatever disability a person may have, they are 38% more likely to be physically inactive than someone who does not have a disability (2). An individual with a disability is more likely to be obese, smoke, and or have high blood pressure. In California, 6.8% of the population has some type of disability (3).



If a person has a disability, being physically active is usually more difficult and can be more challenging. However, just as regular physical activity is beneficial for those without a disability, regular physical activity and exercise is beneficial for those who have a disability. In fact, the <u>CDC's Physical</u> <u>Activity Guidelines for people with a disability</u>, and who can function at a high level, have the same recommendations for physical activity as individuals who do not have a disability.

- Adults with disabilities, who are able, can choose among the recommendations below to achieve the CDC recommendations for weekly physical activity;
 - * At least 150 minutes (2 hours and 30 minutes) a week of <u>moderate-intensity</u> aerobic physical activity or
 - * Choose 75 minutes (1 hour and 15 minutes) a week of vigorous-intensity aerobic physical activity (internal link to vigorous description in Older Adult section), or
 - * Choose an equivalent combination of moderate and vigorous physical activities during the week.
 - * All aerobic activity should be performed in a minimum of 10 minute increments and preferably spread throughout the week.
- Adults with disabilities, who are able, should do muscle-strengthening of moderate to vigorous intensity that involves all major muscle groups as applicable (arms, shoulders, back, chest, abdomen, hips and legs) on two or more days a week.
- When adults with disabilities are not able to meet the above recommendations, they should engage in regular physical activity to their abilities and avoid inactivity.
- Adults with disabilities should consult their primary care physician about the types and amounts of physical activities that are appropriate for their ability level.

Physical Activity Programs for People Living with a Disability

Have individuals that may be candidates for your program ask their physician what specific types of exercise would be most beneficial for their specific condition. If their needs are beyond the scope of what the SNAP-Ed program can provide, the individual will need help from their physician in locating the appropriate services. Depending on the functional level of the individual they may benefit from a more hands on physical activity program with a Registered Physical or Occupational Therapist. Other individuals may be suited for group activity classes or possibly individual workouts in a group atmosphere. More independent individuals may need help with transportation to and from a program site.

Passive Programs

Passive exercises are also known as passive range of motion (ROM) exercise. Exercise is considered passive when the individual doesn't exert any of their own effort to move a muscle or body joint. Instead, a helper, usually a Physical or Occupational Therapist, moves the individual's muscles and joints through their full range of motion for the individual. Passive rehabilitation increases the range of motion and joint function of an impaired individual, preventing a loss of muscle and increasing flexibility.

Active Programs

Active physical activity requires an individual to exert effort to move muscles and or a body joint on their own. Active activity includes stretching to improve ROM, the use of some type of resistance device to strengthen muscle and aerobic exercise where an individual moves their body to increase their heart rate. These types of programs are for more independent individuals and can range from basic group classes for individuals with mobility issues to tethered horseback riding for individuals who can maintain their balance. Other more adventurous programs include downhill skiing or scuba diving. Partnering with an established provider regarding programing for more independent individuals would be beneficial in most SNAP-Ed circumstances.

Special equipment may be needed to participate in active programing activities. At times access to playgrounds, courts and apparatus may be limited and facilities that are accessible and designed for individuals with disabilities may be limited and difficult to find. There are special programs available that are designed specifically for individuals with disabilities, but they can be expensive. If your local agency does not provide any programming for people with disabilities contact local nonprofits or ask local parks and recreation offices for assistance. The following section provides information on portions of the Americans with Disabilities Act, the Rehabilitation Act of 1973 and some free and low-cost programs for individual with disabilities.





The Americans with Disabilities Act (ADA)

The ADA is a civil rights law that prohibits discrimination against individuals with disabilities in all areas of public life, including: jobs, school, transportation and all public and private places that are open to the general public (4).

The law is divided into five titles that relate to different areas of public life. The Physical Activity Resource Guide will focus on sections II and III of the act: Public Services and State and Local Government which address the following requirements; the Act:

- Prohibits discrimination on the basis of disability by "public entities," which are programs, services and activities operated by state and local governments.
- Requires public entities to make their programs, services and activities accessible to individuals with disabilities.
- Outlines requirements for evaluation and planning; making reasonable modification to policies, practices and procedures where necessary to avoid discrimination; identifying architectural barriers; and communicating effectively with people with hearing, vision and speech disabilities.

Section II requires public entities to provide people with disabilities with program access in existing facilities. Program access for people with mobility disabilities may be achieved by relocating a program to an accessible building or changing the way a service is delivered. Assistance with ADA, issues and technical assistance can be found at <u>ADA.gov</u>.

Section III of the ADA prohibits discrimination on the basis of disability in places of public accommodation and in commercial facilities. Places of public accommodation include facilities operated by private entities that fall within 12 broad categories. The content discussed in Section III ensures access to the following:

- 1. Places of Recreation (National, State, County and City Parks).
- Places of Education (public schools, universities and private schools that receive any federal funding).
- Social Service Center Establishments (community based organizations, non-profits and charity organizations, City, County and State service programs.)
- 4. Places of exercise and recreation (privately owned gyms, clubs and other recreation facilities that are open to the public).

Private entities that own, lease, lease to and or operate places of public accommodation are responsible for compliance with all Title III requirements.



The Rehabilitation Act of 1973 (Section 504)

The Rehabilitation Act of 1973 forbids discrimination in a program that receives any federal funding. Typically, schools, City/County Parks and their programs, State Parks and their programs and National Parks and any of their programs are included. Most public schools and some private education institutions receive either ongoing federal funding or grant funds from the federal government. The Act applies to any federally funded contractor programming as well.

Section 504 of the Act requires a school district to provide a "free appropriate public education" to each qualified person with a disability who is in the school district's jurisdiction, regardless of the nature or severity of the person's disability. This is particularly important for school aged children living with a disability as having access to physical education programs and opportunities to participate is a right every child has. If a school, which receives federal funding, is not fulfilling this obligation, make it a priority to let your school board know.

The Act also covers the issue of accessibility to education. This includes safe and accessible

transportation corridors to and from schools for students in wheelchairs, motorized scooters and other mechanical means. Safe, level and properly maintained sidewalks, controlled intersections with cutout ramps and other infrastructure may be required. See Section 5: <u>Physical Activity in</u> the Community Setting, Walking Interventions for "Assessing Community Walkability" to assess neighborhood routes to schools and parks. See Section 6: <u>Physical Activity in the Community</u> <u>Setting, Access to parks and Recreation</u> <u>opportunities, for "Accessibility Audits"</u> that are for local parks. The contents of the Rehabilitation Act can be found at the link above or the U.S. Department of Labor web site.

Programing In Your Area Local Government and Community Programs

If, at the local level, it is too difficult to provide SNAP-Ed eligible individuals who have disabilities with appropriate physical activity opportunities there are many City and County Parks Recreation Departments that offer physical activity programing. Try to partner with them to expand opportunities for people with disabilities. The type of activities will very on the location and size of the City or County.



Image provided by the Center of Achievement[©] California State University, Northridge 18111 Nordhoff Street, Northridge, CA 91330
Some will offer research/practice tested programs specific for those with limited mobility, such as pool programs or chair yoga. Most will offer summer and winter programing with opportunities for children and adults. All programs should accommodate individuals with special needs. Most offer financial support for those in need of assistance. Contact your local City or County Parks and Recreation Department for opportunities in your area.

Paying for ongoing physical activity programing or rehabilitation services can be difficult. For individuals who have health insurance, it is best for them to review policies for an explanation of benefits for rehabilitation and ongoing physical activity programs. Encourage those who do not have health insurance or have exhausted benefits to seek out government, non-profits, and other community based organizations that provide services for free, on an ability to pay scale or offer scholarships to low-income individuals or those with financial hardships.

There are many organizations, small and large, that offer evidence based physical activity programing for individuals with physical disabilities. Programing ranges from small community based classes that focus on one type of activity, such as equine therapy, dancing or swimming to adventurous multi-day outings. Surprisingly, the types and number of activities are wide and include almost everything any abled bodied person can do. Listed below are a few of the national organizations with chapters in California that provide physical activity programing for individuals with disabilities. Not all of the listed programs will offer evidence based curriculum, however, if a program fits the needs of a specific population at the local level which is eligible for SNAP-Ed it may provide a good opportunity to reach out and partner or submit the curriculum for review by a project officer.

Statewide Programs

The programs below are offered in select areas in California. Contact the nearest office for details in their programs.

• YMCA

Founded in 1884 with the mission of meeting social need in the community, some YMCA facilities will offer programing for individuals with disabilities depending on local resources. Contact your local YMCA for specific information. http://www.ymca.net/find-your-y/

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Boys and Girls Club

The Boys and Girls Club offers; Character and Leadership programs, Education and Career Development, Health and Leadership Skills programs and Sports and Fitness programs. Boy's and Girls' Club receive federal assistance so all programs will be open to all youth. <u>www.bgca.org/</u>

Shriners Hospital

Children with orthopedic conditions, burns and spinal cord injury are eligible for care. All services are provided in a family-centered environment. Patient care is provided regardless of the patient's ability to pay. Shriners Hospitals are located in Los Angeles and Sacramento California.

www.shrinershospitalsforchildren.org/ shc/locations

Arthritis Foundation

The Arthritis Foundation sponsors physical activity programing in local areas for adults and children with arthritis. They also provide physical activity information on-line with exercise videos. Local offices may offer the practice tested "Walk with Ease" program. www.arthritis.org/california/

California Association of Area Agencies on Aging (C4A)

The C4A is a non-profit organization representing California's 33 area agencies on aging and is the leading voice on aging issues in the state. The agency is an advocate for meeting the needs of the elderly and adults with disabilities. www.c4a.info/

California Universities

Some California Universities (<u>University of California</u> <u>Los Angeles</u>, <u>California State University Northridge</u> and <u>San Diego State University</u>) offer programs for individuals with physical disabilities. Contact a local college or university near you to find out more.

Disabled Sports USA

Disabled Sports USA's provides national leadership and opportunities for individuals with disabilities to develop independence, confidence and fitness through participation in community sports, recreation and education programs. Chapters in California offer over 40 different programs. Contact a local chapter for details. www.disabledsportsusa.org/

National Center on Health, Physical Activity and Disability (NCHPAD)

The NCHPAD provides information on physical activity, health promotion among people with physical, sensory and cognitive disabilities. The NCHPAD features a variety of resources and services which can benefit all ages and populations. www.nchpad.org/

• The ARC

The ARC offers physical activity programing for individuals with cognitive, intellectual or developmental disabilities. The ARC has developed the HealthMeet[®] program to leverage its national health network to provide free communitybased health assessment and individualized recommendations for follow-up care. Contact the ARC at 1-800-433-5255. www.thearc.org/

REFERENCES:

- 1. "Census Bureau Reports," Nearly 1 in 5 People have a Disability in the U.S., Census Bureau Reports July 27, 2012 <u>www.census.gov/newsroom/releases/archives/miscellaneous/cb12-134.html</u>
- 2. Info graphic 2017 stats on people with disabilities are more likely to...% that are likely to be inactive www.cdc.gov/ncbdd/disabilityandhealth/infographic-disability-impacts-all.html
- 3. US Census quick facts www.census.gov/quickfacts/
- 4. An overview of the Americans with Disabilities Act https://adata.org/factsheet/ADA-overview
- Designing Sidewalks and Trails for Access, Chapter 1 Disability Rights Legislation and Accessibility Guidelines and Standards in the United States <u>www.nacto.org/docs/usdg/designing_sidewalks_trails_access_alexson.pdf</u>

Section 9 Physical Activity Programs in the Worksite







Physical Activity Programs in the Worksite

ANY AMERICANS spend much of their day in the workplace. Employers who create a culture of wellness at work will not only help improve the health of employees, employee's families and communities, but will realize financial and other benefits for the organization. Worksite wellness programs have been shown to increase work productivity, enhance and improve morale, reduce absenteeism, reduce injury and reduce overall costs for employers (1).

Physical activity is a key component of an individual's overall health and should be a major part of a healthy work environment. According to the CDC, increasing PA lowers the risk of many adverse health outcomes such as heart disease, stroke, high blood pressure and certain colon and breast cancers. Physical Activity can also help prevent



weight gain, improve cardiovascular capacity, increase muscular fitness and strength, prevent falls, improve bone strength and reduce symptoms of depression (2). A worksite that encourages opportunities for PA throughout the day positively reflects an organization's culture of wellness.

Physical Activity Program Design at the Worksite

As with PA planning in other sectors, creating effective PA programs in the work environment first involves identifying and recruiting Health Champions or members of the Health Team. Champions should have access to worksite management and administration. This role is usually served well from an individual in the personnel or human resources department. Additional team members should have some experience with PA and be employees interested in PA programing. Also consider individuals from outside the organization such as staff from a local gym and city or county parks. These individuals will provide experience in developing a PA program, possibly provide discounts to employees in off-site programs and provide planning and logistics support. Champions should follow the four essential steps outlined in the introduction: Assess, Plan, Implement, and Evaluate (see Section 1: Designing a Physical Activity Intervention for additional information).

Step 1: Assess

The first step to designing a healthy work environment is to assess whether the current workplace supports a culture where employees can put healthy behaviors into practice. To design effective programming, employers need to assess:

- The organization's existing culture of health, its policies and values
- Employee health risk factors

- Employees' nutritional and physical activity habits and practices
- Employee interests in the program and expected participation levels
- Organizational readiness for a sustainable wellness
 program
- The physical work environment
- Identified barriers to Worksite Wellness programing
- Any other items that may influence wellness programing



The NEOPB *Worksite Wellness Program* was established to encourage employees eligible for Supplemental Nutrition Assistance Program Education (SNAP-Ed) to eat more fruits and vegetables and to be physically active with the goal of reducing the incidence of chronic disease. To that end, the Program developed the California Fit Business Kit, a suite of tools and resources specifically designed to help employers develop workplace cultures that support healthy eating and physical activity among their employees.

 Swift Worksite Assessment and Translation (SWAT) Tool for Observing Worksite Environments

This worksite assessment tool from the CDC assesses worksite PA opportunities and nutrition services. This guide also has implementation instructions. <u>https://stacks.cdc.gov/view/</u>cdc/31332/Email

 CDC Worksite Health Score Card This instrument, developed by the CDC, is used to assess, categorize and catalog a worksites' baseline information prior to starting a worksite wellness program. www.cdc.gov/ workplacehealthpromotion/pdf/hsc-manual.pdf

SAMPLE EMPLOYEE INTEREST SURVEYS

Employee attitudes, preferences, habits and physical abilities are key components of designing a program that fits the organization and its workforce. See <u>Appendix D Worksite Employee Needs and interest</u> <u>Survey</u> as one example. The following are effective, free resources to help assess employee interests:

• Free Resources—WELCOA, Wellness Council Of America.

This website provides a check-list of suggestions to consider when staring a worksite program. Questions are based on successful worksite wellness programs. Sample posters, assessments and surveys, are also available. www.welcoa.org/resources/





• Tompkins County Wellness Interest Survey for all employees (Example-1)

This Likert-style survey is designed to get a basic understanding for where employee interests lie in regards to health and wellness activities at the worksite. It also gives employees a chance to better understand the concept of a wellness program. <u>www.tompkinscountyny.gov/wellness/</u> <u>healthyplaces/ee-survey</u>

CONDUCTING ORGANIZATIONAL HEALTH RISK APPRAISALS (HRA'S)

The HRA tools provide ways to collect information from the workforce environment and identify specific health risk factors of employees. These may include overweight, high body mass index (BMI), high blood pressure, elevated cholesterol, and other potentially adverse health conditions that may lead to chronic diseases. There are several types of HRAs that collect different types of information. The HRAs help the PA program planners select resources to address risk factors that are most prevalent in their workforce. Employers should specify the sort of information they want to collect, how it will be used and how the information collected will be kept confidential.

- Developing a Health Risk Appraisal This CDC website explains HRAs, how to develop them and how to use them in the work place. www.cdc.gov/policy/hst/hra/index.html
- Prevention Partners: How to Organize an Employee Health Promotion Program

The handbook from the South Carolina Public Employee Benefit Authority is a step-by-step approach to planning, designing, implementing and evaluating a wellness program. It includes tips on gaining management's support, forming a wellness committee, conducting employee interest surveys and needs assessments and determining available resources. The handbook is designed for use by the workplace wellness committee, health champion(s) and administrators.

www.docplayer.net/10809130-How-to-organizean-employee-health-promotion-program.html

Step 2: Plan

Armed with the data from the assessment tools, the Health Leadership team members are ready to plan the Worksite Wellness Program (WWP). The results of the worksite assessments should include any current issues regarding PA programing; status of the issues, resources available to address the issues, individuals that have a stake or interest in the issues, any barriers that may exist in PA programing, employee interest and other pertinent information.

Frame the program using the <u>RE-AIM</u> model. If a logic model will be used to implement the program, the wellness committee will use results from the worksite assessments to compete the logic model. The logic model visualizes the identified problems and acts as a roadmap to achieve the desired program outcomes. A well written logic model will include; the overall goal of the wellness program, the current situation of the work environment, status of any identified problems and issues and the resources available to address the problems and issues. The wellness committee will then discuss how to implement the activities/objectives to address the problems to obtain the desired outcomes and overall goal. Program activities are based on <u>SMART Objectives</u>. SMART Objectives can be used with either the RE-AIM process or logic model development.



PA PROGRAM STANDARDS:

To be successful, the WWP needs to meet a variety of standards such as:

- The commitment from senior management to create an organizational policy that establishes and sustains a WWP that has sufficient dedicated resources to support it, such as funding and personnel time. Equipment and facilities are important components to consider for program success.
- A clear statement of philosophy, purpose and goals that declares the organization's commitment to motivate and assist a significant proportion of employees to practice healthier lifestyles. Ideally, management shows support by announcing and participating in the WWP. The WWP requires a process of assessing organizational and individual needs, health program interests, as well as program costs, risks and benefits.
- 3. Require leadership from well-qualified health/ fitness professionals in the program's design, implementation and ongoing operations.
- 4. A design that addresses the most significant health risks within the employee population and needs of the organization.

- 5. High quality and convenient programs that motivate participants to achieve lasting behavior changes.
- 6. Effective marketing to achieve and maintain high participation rates.
- 7. Efficient systems for quality program operation and outcomes.
- 8. Procedures for evaluating the program's quality and outcomes.
- 9. The WWP should contain a system for communicating the program results to employees, staff and senior management.

PROGRAM ELEMENTS

It is unlikely that everyone in the workplace will have the same understanding of PA. They may not have the desire to be active or the confidence to start a PA program. They may not be ready to make the commitment to change or physical abilities to start. Therefore, strategies aimed at creating a culture that supports PA at multiple levels should include an approach that offers flexibility and variety. Program elements that include awareness activities, behavior activities, environmental activities and PA programming based on employee expressed interests can support employee program needs and desires at many levels.

AWARENESS ACTIVITIES

Many employees may not understand or will not know they need to change their current behaviors and lifestyles in order to improve their health. Awareness strategies are designed to support workers as they learn new skills and behaviors adapting to lifestyle changes.

Activity	Examples				
Posters	Show active images that promote people using the stairs, conducting walking meetings, bicycling to work or other activities.				
Brochures	Place information about fitness in brochure racks in high-traffic areas.				
Displays	Encourage seasonal activity by placing a display featuring cold-weather, and warm- weather exercise apparel and activities at building entrances and lobbies.				
Newsletters	Circulate employee health newsletters on a variety of topics such as, being active as a family, feature employee interests and individual success stories.				
Bulletin boards and e-boards	Messaging should promote trying a new activity or sport. Provide demonstrations of low, moderate or high level physical activities.				
E-mail messages	Encourage walking or some other physical activity for 30 minutes on a daily basis.				
Web page	Provide seasonal or monthly awareness messages placed on the health promotion program home page. Provide links to other service agencies with similar messages.				
Incentives	Talk to local gyms, sporting goods stores, bike shops, natural food stores and other fitness related business near the worksite to discuss the possibility of employee discounts and group rates on goods and services for employees.				
Special events	Offer group activities on National Employee Health and Fitness Day (the 3rd Wednesday every May), to increase awareness of physical activity. Invite and host a local celebrity athlete or well-known athlete as a guest speaker. Conduct health fairs to promote the Worksite's programs.				

BEHAVIOR ACTIVITIES:

Behavior change can be difficult. People are more successful with long-term change if they have a chance to practice the new behavior. There are multiple ways to provide those opportunities. Again, variety is the key!

Activity	Description
Classes	Classes that allow for active participation and social support can be effective in changing behavior. Classes can be activity based such as yoga or aerobic focused or education centered on diet such as Weight Watchers or similar programs.
Phone-based	These services can provide ongoing support and guidance for behavior change. They help to establish a connection between current unhealthy behaviors as an impediment to healthy ones.
Individual consultation	Health professionals such as dietitians, exercise physiologists or health educators meet periodically with employees on an individual basis to provide support and guidance for behavior change.



ENVIRONMENTAL ACTIVITIES:

Employees who are ready to change will be more successful if specific services and opportunities are available to support new behaviors. These strategies are aimed at producing long-term and sustainable changes by employees and can be the most effective way to assist larger numbers of people in changing their health risk behaviors if it is done in a supportive way that includes the other two strategies of awareness and behavior change.

Activity	Examples
Onsite facilities	 Make healthy foods (vending, cafeteria) and physical activity areas available at the worksite. Inside areas can consist of a small gym or exercise room. Outside areas can be a walking path, volleyball court or a half-court basketball area.
Policy change	Establish and implement worksite wellness policies such as a healthy foods policy, tobacco free environments or flextime scheduling.
Sponsorship to off- site services	 Offer subsidized gym memberships and company sponsorships to after-hours/ off-site activity leagues (co-ed softball, volleyball or other sport).
Specialized work related services	• Ergonomic assessments, protective gear or a reasonable accommodation for work related tasks must be offered by employers with 15 or more employees. For more specific information please refer to the Americans With Disabilities Act 1990 and amendment of 2009.
Chronic disease management	 Referral services to chronic disease (hypertension, diabetes, hyperlipidemia, asthma or other chronic disease) management counselors provide opportunities for employee education and to learn "self-management" skills which should include PA when possible. Medical counselors can develop disease management plans based on an individual's specific needs.
Employee assistance support programs	 Employees can benefit from mental health/counseling services for such things as substance/alcohol abuse, marital or family issues, financial problems or legal counsel.
Adequate health care coverage	• Ensuring health care coverage is available for employees at a reasonable cost and educating employees how to enroll in insurance services is a positive value for employees.
Special events	• Offer group activities on National Employee Health and Fitness Day (the 3rd Wednesday every May), to increase awareness of physical activity. Invite and host a local celebrity athlete or well-known athlete as a guest speaker. Conduct health fairs to promote the Worksite's programs.

PROGRAM ACTIVITIES:

Using the <u>PSE method</u>, employers, wellness teams and health champions in the workplace can create new policies, modify the existing work environment to support favorable conditions for PA by offering opportunities and programs that fit the employees' expressed interests and provide social support to participate in featured worksite activities.

Activities	Examples
Environmental Changes	 Provide exercise areas for indoor group activities. Provide showers and changing rooms. Encourage walking programs by marking sidewalks around the worksite with arrows and distance markers. Encourage bicycling by providing bike storage and lockers. Provide vending machines with healthy snacks, fresh fruits and chilled water.
Provide interesting employee programming opportunities that encourage PA participation.	 Offer brown bag lunches that include discussion topics related to physical activity. Organize exercise classes that demonstrate a selection of activities to help employees choose one that is right for them. Examples might include yoga, cardio-kickboxing, Zumba, or Pilates. Find fitness partners who can support on-site PA before, during and after work. Implement physical activity incentive programs. Offer off-site organized physical activities. Shift schedules or extend lunch periods to allow time for physical activity. Encourage employees to use the stairs (up and down). Encourage stretch breaks throughout the day and during meetings. Create walking clubs.

WORKSITE PROGRAM PLANNING TOOLS

The following tools and guides will help the wellness committee or the Health Champion implement a worksite wellness program.

Worksite Health Promotion

This CDC site offers resources to help start, assess and sustain workplace programs. <u>www.cdc.gov/workplacehealthpromotion/</u>

South Carolina's Worksite Wellness Toolkit and Resource Guide

This toolkit is a guide to creating a worksite wellness program. The toolkit includes the necessary tools, surveys and sample polices for a comprehensive worksite wellness program. www.scdhec.gov/library/CR-009551.pdf

The American Cancer Society's Active for Life Program

The American Cancer Society offers this online, 10-week program that uses individual and group strategies to encourage people to increase the amount of their personal PA on a regular basis. /www.activeforlife.org

The Centers for Disease Control and Prevention's (CDC) Physical Activity for Everyone

This website contains extensive educational material on physical activity. Topics include recommended activity levels, examples of exercise (moderate and vigorous-level) activities and recommended activities according to age.

www.cdc.gov/physicalactivity/everyone/guidelines/index.html?s_cid=govD_dnpao_004

The 2008 Physical Activity Guidelines for Americans

The guidelines are intended for use by health professionals and policymakers. They can also be used to determine the types of activities that are suitable for the workplace environment. The document describes the types and amounts of physical activity that offer health benefits for adults. The document also includes resources to help guide physical activity choices. www.health.gov/PAGuidelines/



Workwell North Carolina

This site contains several toolkits each focused on an individual aspect of a comprehensive worksite wellness program. <u>www.eatsmartmovemorenc.com/Worksites/Worksites.html</u>

Worksite Resource Kit (Colorado Physical Activity and Nutrition Program)

This worksite kit designed by the Colorado Physical Activity and Nutrition Program, is for worksites to bring awareness of certain resources and program ideas to be used to start or further worksite wellness initiatives. The kit focuses on improving physical activity and nutrition; however it is not designed to be a blueprint for a comprehensive program. It does provide an array of strategies and action steps that could be built into overall program efforts.

www.wellnessproposals.com/pdfs/tool kits/colorado worksite resource kit.pdf

Blue Cross Employee Wellness Planning/Assessment Tools

The site provides examples for a health and wellness program cover letter, employee interest survey, bench marks for a successful program and a health and wellness observances calendar. www.bluecrossma.com/blue-iq/tools-and-resources/campaign-planning.html

The Cycle-Friendly Employer Guide

This resource offers information on planning and implementing bicycle-friendly programs in the work place. Resources include a checklist of facilities for cyclists (secured parking, changing area and other facilities) and a work place bicycle plan. It also offers information on starting an office Bicycle Users Group (BUG) program.

www.gw.govt.nz/assets/Transport/Workplace-Travel-Plans/cycle-friendly-employer-guide.pdf



Step 3: Implement

Now that the organization has identified Wellness Team members or Health Champions and has justified reasons to initiate a WWP, the next step is to create PA programs in the workplace. Champions and other stakeholders have established a Wellness Committee that has assessed company policies, practices and have surveyed their colleagues on desired programing and program participation expectations. They have reviewed PA program standards and developed their plans, budgets and time lines. Now is the time to begin implementing a physical activity program in the workplace (see Section 1 Introduction: Implementation, PA Planning Worksheet).

It's important to remember that one of the primary aims of program implementation is to provide employees with the information and opportunities to identify and meet their recommended levels of physical activity in a way they will enjoy and sustain. The Steps to Wellness Employee Wellness Toolkit designed by the NEOPB and the Center for Disease Control:

Steps to Wellness Employee Wellness Toolkit

This is a guide to implementing the 2008 Physical Activity Guidelines for Americans in the workplace. It outlines seven steps in developing a worksite wellness program: 1) Building Support, 2) Planning and Assessing, 3) Promoting, 4) Implementing, 5) Evaluation, 6) Sharing results and 7) Sustainability. It is designed to help employers create or expand wellness programs by increasing the amount of physical activity of their employees. The tool kit provides:

- * An overview of the *Physical Activity Guidelines*
- * Suggestions on how to create a wellness culture
- * Examples of what other companies have done
- * Resources to establish or strengthen an existing wellness program

www.cdc.gov/physicalactivity/worksite-pa/ toolkits/pa-toolkit.htm

Step 4: Evaluate

Health promotion program factors that contribute to successful implementation, results and sustainability involve tracking progress and documenting results (collecting data). In evaluating the program, worksite leaders and champions need only to compare stated goals with outcome results from activities and objectives listed in the RE-AIM process and logic model they developed to implement the program. Revisiting the stated program goals and objectives and comparing program progress; recruiting internal and external program partners, marketing the program, recruiting participants, and or results such as the number of participants, frequency of attendance, or improving the physical work site environment to encourage PA to baseline information is useful in measuring program results. Following are some evaluation factors to consider:

- Who actually participates?
- · How many employees participate?
- What are the employee physical activities?
- · How physical activity is measured?
- What are program completion rates?
- What is the frequency of employee participation?
- Are there many positive results from your program?
- Any physical changes in the worksite environment?
- Did participants' change health-related behaviors (e.g., diet, physical activity)?
- Any changes in employees' BMI numbers?
- Did employees drop out of the programs?
- Are there any new or improved organization policies to support wellness programing?

Increasing the physical activity of employees and evaluating several factors can help plan or strengthen the worksite PA program. It is important to look at this assessment early in the planning process if your company is new to the worksite program (see Introduction: Evaluation for additional resources).



POLICY, SYSTEMS AND ENVIRONMENTAL (PSE) CHANGE IN THE WORKPLACE

Worksites around the country are beginning to implement <u>PSE changes</u> to increase PA levels of employees. For years public health initiatives have focused on individual behavioral change. However, research indicates to have the most profound impact on individual health behaviors it is best to make the healthy choice the easy choice in all environments. The focus of the PSE change contains the genuine influence behind long-term sustainable behavioral change.

Physical Activity Policies: A physical activity policy is a written document, kept on file in the workplace, which includes a statement of intent about how a company proposes to address physical activity issues in the workplace. One of the most notable benefits of adopting a physical activity policy in a workplace is the way in which the workforce perceives the policy. Unlike many other policies that may appear restrictive to the employee, a physical activity policy makes a very positive statement about the value a company places on the health and wellbeing of its workforce. Adopting a worksite PA policy is also a very practical way of improving company public relations, both internally and externally.

Policy Example: A worksite wellness policy may contain a statement such as: "Reduce the cost of medical insurance premiums to employees".

A policy change might contain wording such as "Employees must be allowed to obtain 30 minutes of daily aerobic PA." A systems change to implement the policy could be to provide each employee a paid 10 to 15 minute walking break every two hours to achieve 30 minutes of daily aerobic PA. A system like this allows employees to participate in daily aerobic PA at their convenience without punishment for noncompliance.

Systems change example: In order to implement a new policy as part of a worksite wellness program, a systems change an employer could offer would be to regularly scheduled health risk assessments for its employees in order to identify the number of employees who may be at risk of a chronic disease. This allows employees to get a baseline on their personal health and make healthy lifestyle changes or reaffirm current positive behaviors.

An environmental change: Involves some change in the physical environment that facilitates a positive healthy behavior change.

Environmental change example: providing secured areas for bike racks so employees can bicycle to work and safely park and lock their bicycles. This allows for increased support and opportunities for improved physical activity to and from work.

Programs that focus on individual behavior are often difficult and costly to continue over time. Whereas, implementing strategies that support making the healthy choice the easy choice through PSE change will result in greater impact and sustainability (4).

Success Story: Ruskin Manufacturing Company Gets Moving and Has Fun!

BACKGROUND

Three years ago, Ruskin Manufacturing, an air conditioning manufacturer in Ontario California, was directed by its parent corporation to find ways to reduce employee work-related injuries and reduce health and insurance costs.

ASSESS

After deliberating the best methods to go about completing the directive, Ruskin management in collaboration with the LHD in San Bernardino decided on using the NEOPB—*California Fit Business Kit* to assess their work environment and improve the health of their 140 employees.

PLAN

Ruskin management decided on the following planning steps.

- Formation of a Wellness Committee who would:
- * Review the worksite environment assessment to identify how to adjust job specific tasks to reduce injuries and identify needed changes to the work site to accommodate wellness programing.
- * Survey employees to determine what types of actives would be of interest to employees and the likelihood of participation.
- * Develop partnerships with PA related local business.
- * Determine how to evaluate the successes of the wellness program.

IMPLEMENTATION

To reduce task-related injuries, Ruskin assessed job related tasks and instituted a mandatory 15-minute paid stretching period every morning for each employee. In the winter, this allows employees an opportunity to warm up before getting started at their work station, and in the summer early morning exercise beats the Southern California heat.

The wellness committee instituted lunch time wellness activity programing that included cardiokickboxing, yoga and Zumba classes. The wellness committee members have been trained in leading these activity classes and take turns leading the rest of the employees.

Other activities for employees included informal volleyball or basketball tournaments during lunch breaks in an outdoor space behind the Ruskin building that's been outfitted with a basketball hoop and volleyball net. These tournaments are very popular and those who don't participate often watch as they eat lunch. With the implementation of the WWP, Ruskin's wellness committee has organized:

- An off-site manager vs. employees' soccer tournament.
- A company club that organizes group hiking and bicycling events.

- An employee health fair in the parking lot that featured a salsa making contest,
- Hypertension/diabetes screening, massage, and a bicycle-powered smoothie maker. Employees were able to leave in groups of ten to visit the health fair during their regularly paid time.
- A "Biggest Loser" competition among employees to see who could lose the most weight. They gave prizes and a paid day off to the winner, who lost 20 lbs. in three months.

Ruskin has also put PA stations throughout their site to help employees fit exercise into their daily work routine. They used the *Fit Business Kit* to create *Healthy Stairways*, as a way to encourage people to walk up and down the stairs and enable them to track their frequency. Other PA stations include a hula hoop station, a stretching station and informative stations throughout the site which offer encouraging words, such as, "You could burn up to 544 calories per hour playing basketball", or "Twenty-four times around equals one mile!" These low cost environmental changes are highly motivating for employees and set the tone for health all over the worksite.

EVALUATION

Although a formal evaluation of Ruskin's wellness program has not been completed. Participation in the wellness program is very popular. According to Ruskin's Human Resources Director, Julie Bellow, Ruskin sees fewer injuries as a result of the mandatory morning stretches and the other health education and wellness activities the company is implementing. Having employees sign up for individual activities, (health education session and stair climbing and team activities such as basketball and volleyball), help keep track of the number of employees participating in the program. She perceives that workers' compensation requests are down and that beyond the bottom line, by making employee health a priority and allowing the wellness committee to be creative and dynamic in their events and activities, Ruskin is showing that it cares about the well-being of its employees.

END NOTES:

- Baicker K, Cutler D, Song Z., "Workplace Wellness Programs Can Generate Savings." Health Affairs 2010 Feb; 29 vol. 2 pp. 304–311.
 www.healthaffairs.org/doi/abs/10.1377/hlthaff.2009.0626
- 2. U.S. Department of Health and Human Services, Benefits of Physical Activity: 1600 Clifton Rd., Atlanta GA June 4, 2015 www.cdc.gov/physicalactivity/basics/pa-health/

OTHER REFERENCES

- 1. U.S. Department of Health and Human Services, "2008 Physical Activity Guidelines for Americans." <u>http://www.health.gov/PAGuidelines/</u>
- 2. Baun, William B., William L. Horton, and Jean Storlie, "Guidelines for Employee Health Promotion Programs: Association for Worksite Health Promotion." Champaign, IL: Human Kinetics, 1992.
- 3. PartnerSHIP for Health, "Worksite Wellness Toolkit: Making Wellness Worth Your While." www.partnership4health.org/assets/etoFileBrowser/Worksite%20Wellness%20Toolkit.pdf
- 4. Center for Disease Control and Prevention, Division Nutrition, Physical Activity and Obesity of "Physical Activity and Health: The Benefits of Physical Activity. June 4, 2015. www.cdc.gov/physicalactivity/everyone/health/index.html?s_cid=cs_284

Appendices



Appendix A Physical Activity Program Planning Worksheet

PHYSICAL ACTIVITY PLANNING TEAM

Physical Activity Workgroup					
Name	Title	Organization	Contact Information		

Below, assess and describe the PA challenge concern or symptom. Make sure to include the population that you will address in the intervention (see <u>Physical Activity Planning Worksheet</u> process example for more information).

In the box below write a PA Program goal. Work with the group to plan your intervention. How are you going to address this challenge, concern, or sympton? Describe your PA program or intervention in your own words (See example page 21 for more information).

Program Goal:			
Program Plan:			

What specific results or outcomes are you seeking? State the <u>SMART objectives</u> for your intervention. Develop a logic model for the process to use as a road map to implement the program.

Objectives:

Before implementing the plan and identify the tasks required. List the personal responsible for completing tasks, and the timeline for completion. Insert the completed tasks into the logic model activities section.

What needs to be done?	Who will do it?	When must a task be completed?

Monitor and evaluate your progress with the program. Work within the group to **establish checkpoints** to determine if the stated goals are being met.

Evaluation Check Points					
What needs to be done?	How will it be done?	Who will do it?	How often? (e.g., monthly, quarterly, annually)	Who will you report your results to?	

Appendix B Worksite Workforce Characteristics Survey (To be complete by worksite management)

1. What is the total number of full-time and part-time employees in all locations of the entire company as of the last payroll?

Please provide your best estimate of the total number of employees who are employed by the entire organization, not your particular worksite.

2. How many full-and part-time employees are currently employed at your worksite? _

Please provide your best estimate of the total number of employees who are employed by your particular worksite, not the entire organization.

3. Approximately how many of the employees at your worksite are:

Full-time (35 hours or more per week)	Male	
Salaried (as opposed to hourly)	Female	
Under the age of 40	Preform manual labor (production, labor, unskilled work)	
Represented by a union	Non-manual labor (administrative, professional	

- 4. In the past 12 months, did your worksite downsize the workforce, increase the size of the workforce, or stay the same? **Check one only**
- □ Down-sized □ Stayed the same
- $\hfill\square$ Increased in size $\hfill\square$ Both down-side and increased in size
- 5. Does your worksite have a wellness committee?
- □ Yes □ No
- 6. Does your worksite/employer offer employees a health insurance plan?
- □ Yes □ No (if No, go to question 8)
- 7. What is your health insurance plan? Check all that apply
 - □ Health maintenance insurance plan □ Preferred provider organization (ppo)
 - Indemnity plan

Other: _____

Health Promotion Programs and Services Survery

(To be complete by worksite management)

For question 8, give your best estimate for the number of times the health promotion program or service is offered or the classes meet. When indicating the number of class sessions in the past year, please indicate the total number of meeting times. For example, if a course is offered one time but has 12 class sessions, then the count would be 12 sessions. Or, if a class is offered all year long twice a week, then the total number of class sessions would be 104.

- 8. Does your worksite offer employees any health programs, services, or classes? 🛛 Yes 🖓 No
- 9. Please indicate if the following health promotion programs or services are currently offered at your worksite. Mark "Yes" or No."

			Answer only if Offered			
		Onsite or Offsite	Free to Employee	How often is this offered per year?		
Heathy eating or nutrition classes	□ Yes □ No	OnsiteOffsite	□ Yes □ No	# of class sessions in past year		
Individual nutrition or diet management counseling	□ Yes □ No	OnsiteOffsite	□ Yes □ No	# of counseling sessions in past year 		
Fitness assessments	□ Yes □ No	OnsiteOffsite	□ Yes □ No	# of class assessments in past year		
Group physical activity	□ Yes □ No	OnsiteOffsite	□ Yes □ No	# of class sessions in past year		
Health risk appraisals	□ Yes □ No	OnsiteOffsite	□ Yes □ No	# of appraisals in past year		
Tobacco cessation classes	□ Yes □ No	OnsiteOffsite	□ Yes □ No	# of class sessions in past year		
Other	□ Yes □ No	OnsiteOffsite	□ Yes □ No	# of other activities in past year		
Other	□ Yes □ No	OnsiteOffsite	□ Yes □ No	# of other activities in past year		

Appendix C

Worksite Environment Policies and Incentives Survey

(To be complete by worksite management)

For question 10, material incentives^{*} could include t-shirts, coffee mugs, cash payments or other items. Benefits and/or plan-related incentives could include improved benefit allowances, discounted health insurance, increased disability payments, additional life insurance, or added vacation "well days" off.

10. Please answer the following questions about policies at your worksite.

Does your worksite have a policy statement supporting employee physical activity (policies that allow workers to take walking breaks, do pre-heavy-labor stretching, and take additional time off during lunch to exercise)?	NoneWritten / FormalInformal
Is it company policy that health promotion programs are provided during company time (not lunch hour)?	 None Written / Formal Informal
Does your worksite subsidize membership to offsite recreation or fitness facilities?	□ Yes □ No
Does your worksite provide physical activity or exercise messages to the general employee population, such as posters or brochures?	□ Yes □ No
Does your worksite promote the availability of onsite health promotion programs through at least two communication channels (e.g. newsletters, bulletin boards)?	□ Yes □ No

11. Please answer "Yes" or No" to the following questions about incentives for healthy behaviors.

		Answer only if incentive is provided		
		Material	Benefits Plan	
Does your worksite provide any type of incentives for healthy eating?	YesNo	YesNo	□ Yes □ No	
Does your worksite provide any type of incentives for maintaining an ideal weight?	YesNo	YesNo	YesNo	
Does your worksite provide any type of incentives for engaging in physical activity?	YesNo	YesNo	□ Yes □ No	

Adopted from the California Fit business Kit: May 2014

*For restrictions on the use of SNAP-Ed funds to purchase incentives or NERI see USDA SNAP-Ed guidelines for details: www.snaped.fns.usda.gov/snap/Guidance/FinalFY2016SNAP-EdGuidance.pdf

Appendix D

Worksite Environment Physical Activity Opportunities Survey (To be complete by worksite management)

1. For the following questions, please answer "Yes" or "No" about the availability of items that enables people at your worksite to be physically active while at work.

Does the worksite environment offer any of the following facilities or opportunities to employees?		Answer only if available onsite		
		Free to employees	Approximate % of employees who use these facilities	
A locker room with showers?	YesNo	□ Yes □ No		
An indoor area set aside specifically for exercise and physical activity?	□ Yes □ No	□ Yes □ No		
Aerobic exercise equipment, such as stationary bicycles or treadmills?	□ Yes □ No	□ Yes □ No		
Outdoor facilities, such as jogging trails or walking paths?	□ Yes □ No	□ Yes □ No		
A walking club or other physical activity club?	□ Yes □ No	□ Yes □ No		
Accessible stairwells that are safe and well lit?	□ Yes □ No	□ Yes □ No		
Well lit and secured bicycle parking?	□ Yes □ No	YesNo		

2. Please answer the following questions by placing a check (v) in the most appropriate box.

How many people at your worksite	Almost no people	Some people	Half the people	All people	Don't know
are active as part of their job (i.e., doing manual labor or walking briskly, as opposed to mostly sedentary-tasks like computer work)?					
live within walking or biking distance from work?					
park several blocks away or further in order to walk a little extra as they come to/from work?					
feel safe walking or spending time outside in the surrounding community?					

Appendix D

Employee Needs and Interest Survey

(To be completed by employee)

Please indicate how likely you would be to participate in each of the following programs by placing a check ($\sqrt{}$) in the corresponding box indicating you would be "Extremely Likely", "Likely", "Somewhat Likely" or "Unlikely" to participate in any of the listed activities. (Adopted from Wellness Council of America, 2005).

	Extremely Likely	Likely	Somewhat Likely	Unlikely
1. Body fat testing				
Education Programing				
1. Back safety				
2. Cancer Prevention				
3. Heart disease prevention				
4. Stroke prevention				
5. Cholesterol reduction				
6. Diabetes prevention				
7. Headache prevention and treatment				
8. Cold and flu prevention treatment				
Employee Assistance Programs				
1. Depression				
2. Job Stress				
3. Substance abuse				
4. Parenting difficulties				
5. Accepting change				
6. Anger management				
7. Living with and managing chronic conditions such as diabetes				
8. Pain management				

	Extremely Likely	Likely	Somewhat Likely	Unlikely
Fitness Programming Onsite				
 Gym room with a selection of weights and aerobic equipment (treadmill, stationary bicycles) 				
2. Fitness classes: yoga, Zumba, Cardio- kick, tai-chi and similar activities				
 Lunch time team activities: basketball, volleyball, walk-fit 				
Fitness Programming Offsite				
1. Discount memberships to local gyms and activities such as golf or bowling				
2. Company sponsored teams in after hour leagues (softball, bowling, volleyball)				
Immunization Programs				
1. Flu				
2. Tetanus				
3. Hepatitis B vaccine				
4. Lyme disease vaccine				

Appendix E USDA Best Practice Criteria

CHECKLIST FOR EVIDENCE-BASED APPROACHES: SNAP-ED

Checklist for Evidence-Based Approaches

The purpose of this 4-step checklist is to help States and Implementing Agencies meet SNAP-Ed evidencebased program and practice requirements. An evidence-based approach for nutrition education and obesity prevention is defined as "the integration of the best research evidence with the best available practice-based evidence." Evidence-based allowable uses of SNAP-Ed funds include conducting and evaluating education and social marketing interventions, and implementing and measuring policy, stems, and environmental change strategies that will make it easier for low-income persons to make dietary choices and be physically active.

An evidence-based approach may include a mix of strategies (broad approaches to intervening on obesity prevention target areas) and interventions (specific set of evidence-based, behaviorally-focused activities and/or actions to promote healthy eating and active lifestyles). The SNAP-Ed Strategies and Interventions: An Obesity Prevention Toolkit for States contains a listing of many evidence-based strategies and interventions in child care, school, community, and family settings. The Toolkit is the starting point for choosing evidence-based obesity prevention programs for SNAP-Ed.

Checklist for Evidence-Based Approaches

FNS has identified three categories of evidence for strategies and interventions along a continuum: researchtested, practice-tested, and emerging. These categories vary according to scientific rigor, evaluation translation, and degree of innovation. Each category along the continuum is vital for expanding and building the knowledge base of effective practices. Movement along the continuum, requires that programs are fully implemented and evaluated.

Research-tested: The approach is based upon relevant rigorous nutrition and public health nutrition research including systematically reviewed scientific evidence, and other public food/physical activity environments, or policies across multiple populations, setting, or locales.

Practice-tested: This approach is based upon published or unpublished evaluation reports and case studies by practitioners working in the field that have shown positive effects on individual behaviors, food/physical activity environments, or policies

Examples: Eat Well Play Hard in Child Care Settings (New York), Empowering Healthy Choices in Schools and Homes (Georgia)

Emerging: The approach includes community-or practitioner-driven activities that have that potential for obesity prevention, but have not yet been formally evaluated for obesity prevention outcomes. Evaluation indices may reflect cultural or community-informed measures of success.

Example: East Smart in Parks (Missouri), Fit Business Kit Worksite Program (California)

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CHECKLIST FOR EVIDENCE-BASED APPROACHES: SNAP-ED

Identify Strategy or Intervention Name:		
Step 1: Many strategies or interventions have already been reviewed for their effectiveness for nutrition education and obesity prevention. To begin, check if the approach is recognized as evidence-based by at least one government or scientific agency, or listed in a registry reviewed by experts and researches in nutrition education and obesity prevention.	Yes	No
National Collaborative for Childhood Obesity Research: SNAP-Ed Intervention Toolkit		
Food and Nutrition Service: Nutrition Evidence Library		
National Cancer Institute: Research-Tested Interventions Program		
U.S. Department of Health and Human Services: Guide to Community Preventive Services		
What Works for Health: Policies and Programs to Improve Wisconsin's Health		
University of North Carolina Center of Excellence for Training and Research Translation		
Other (specify:)		
If you answered yes to any of the above, congratulations, your strategy or interventio research- or practice-tested! If you answered no, go to Step 2.	n has been a cei	rtified as
Step 2: Search for evaluation for your intervention or strategy with a university or public health partner using the following guidelines.	Yes	No
A. Is there at least one peer-reviewed ¹ , scientific journal article that concludes your approach has significant positive impacts on individual behaviors, food/ physical activity environments, or obesity prevention policies?		
B. Was the approach tested and compared against some type of control condition present (e.g., a similar venue or population that does not receive the intervention or strategy) with significant positive effects?		
If you answered yes to both item A and B, your approach is research-tested . Else,	go to item C.	
C. Is there at least one evaluation report or case study that shows your approach has positive changes in individual behaviors, food/physical activity environments, or obesity prevention policies?		
If you answered yes to item C, your approach is practice-tested . Else, go to Step 3	3.	

Step 3: Many strategies or interventions have the potential for obesity prevention, but have not been thoroughly tested. The following criteria will help categorize an emerging approach.	Yes	No
A. Does the approach align with the <u>Dietary Guidelines for Americans</u> , the <u>Physical Activity Guidelines for Americans</u> , and/or <u>Healthy People 2020</u> objectives for Nutrition and Weight Status?		
B. Does the approach reflect the budgetary and time constraints of the low- income population?		
C. Does the approach reflect the solutions that would make healthy eating and physically active lifestyles easier and more appealing to SNAP-Ed participants? (Solutions that make healthy choices easier may include changes in food retail, food distribution, or recreation facilities, including hours of operation, price, promotions, placement, marketing, communication, and related operations and policies.		
D. Will the approach be evaluated for changes in individual behaviors, food/ physical activity environments, or obesity prevention policies?		
If you answered yes to items A–D, go to item E. Else, your approach is not con emerging for SNAP-Ed.	sidered	
E. Does the approach reflect the social, cultural, and/or linguistic needs and resources of the low-income population(s) served?		
F. Does the approach address the results and implications of a state or community needs assessment?		
G. Does the approach address state or local priorities/strategic plans?		
If you answered yes to items E, F, G (any one of them), your approach is emergin	ng.	

REFERENCES

- 1. Baker, S; Auld, G: MacKinnon, C; Ammerman, A; Hanula, G; Lohse, B; Scott, M; Serrano, E; Tucker, E; and Wardlaw, M. Best Practices in Nutrition Education for Low-Income Audiences (2014).
- Brennan L, Castro S, Brownson RC, Claus J, Orleans CT. Accelerating evidence review and broadening evidence standards to identify effective, promising, and emerging policy and environment strategies for prevention of childhod obesity. Annu Rev Public Health 2011;32:199–223
- Cates, S; Blitstein, J., Hersey, J., Kosa., K., Flicker, L., Morgan, K., and Bell, L. Addressing the Challenges of Conducting Effective Supplemental Nutrition Assistance Program Education (SNAP-Ed) Evaluations: A Step-by-Step Guide. Prepared by Altarun Institute and RTI International for the U.S. Department of Agriculture, Food and Nutrition Service, March 2014.
- 4. Kaplan Ge, Juhl AL, Gujral IB, Hoaglin-Wagner AL, Gabell BA, McDermott KM. Tools for Identifying and Prioritizing Evidence-Based Obesity Prevention Strategies, Colorado. Prev Chronic Dis 2013;10:120275

CDPH Funding Attribution Statement



The California Department of Public Health, with funding from the United States Department of Agriculture's Supplemental Nutrition Assistance Program—USDA SNAP, produced this material. These institutions are equal opportunity providers and employers. For important nutrition information, visit www.CaChampionsForChange.net.