1. Physical Activity and Fitness

Goal

Improve the health, fitness, and quality of life of all Kentuckians through the adoption and maintenance of regular, daily physical activity.

Overview

The first Surgeon General's Report on Physical Activity and Health, released in 1996, concluded that regular sustained physical activity can substantially reduce the risk of developing or dying of heart disease, diabetes, colon cancer, and high blood pressure. Additionally, research by Blair, SN et al. (JAMA 262:2395-2401, 1989) and Paffenbarger, R.S. Jr., et al. (N Engl J Med 328:538-45, 1993) has shown that regular physical activity can reduce the risk of osteoporosis, promote weight loss and foster a sense of well being. According to the Behavioral Risk Factor Surveillance System (BRFSS) conducted by the Division of Epidemiology and Health Planning, Kentucky Department for Public Health (KDPH), Kentucky ranks second in the nation for physical inactivity.

With high physical inactivity rates, Kentuckians also have seen increasing rates of overweight and obesity. Kentucky BRFSS data reveal a clear trend of an increasing number of individuals being overweight or obese. Kentucky ranked fifth highest in the nation for obesity in 2001 and tenth in 2002. Consistently, males tend to have a slightly higher prevalence of overweight than females, and blacks tend to have a higher prevalence than whites. The prevalence of overweight and obesity is a serious public health threat in Kentucky. The 1988 Surgeon General's Report on Nutrition and Health established that being overweight is associated with elevated serum cholesterol levels, elevated blood pressure and noninsulin-dependent diabetes, as well as being an independent risk factor for coronary heart disease.

Summary of Progress

Although some progress has been made in meeting the objectives for Healthy Kentuckians 2010 in regards to physical activity, recent data indicate that the proportion of Kentuckians who are either overweight or obese has increased. Progress has been made in participating in any leisure time physical activity, and the target has been achieved for moderate physical activity. Nine objectives or sub-objectives were revised to meet current data collection efforts and definitions, and one objective was deleted for lack of data.

Progress toward Achieving Each HK 2010 Objective

1.1aR. Reduce overweight to a prevalence of no more than 25 percent among Kentuckians ages 18 and older.

Reason for Revision: The definition for overweight changed after the original Healthy Kentuckians 2010 physical activity chapter was drafted. The current definition for overweight is a Body Mass Index (BMI) greater than or equal to 25 and less than 30. The current definition for obesity is a BMI greater than or equal to 30. The original objective 1.1 has been changed to two revised objectives 1.1aR. and 1.1bR. to reflect the new definition.

Data Source: Behavioral Risk Factor Surveillance System (BRFSS)

Baseline: 38 percent in 2000

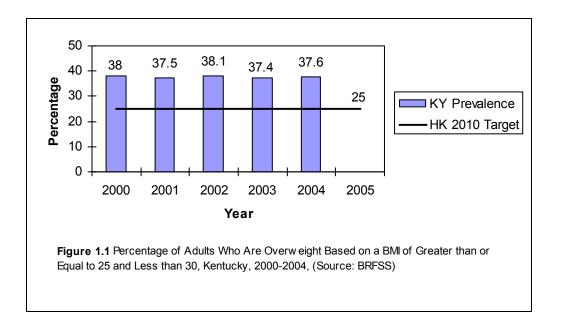
HK 2010 Target: 25 percent

Mid-Decade Status: 37.6 percent in 2004

Strategies to Achieve Objective:

 Implement the work plan specified in the Kentucky Nutrition and Physical Activity Program (KNPAP) to Prevent Obesity and Other Chronic Diseases.

- The overweight and obesity problem in Kentucky and barriers to interventions will be evaluated through joint efforts of the KDPH staff, the Partnership for a Fit Kentucky Steering Committee, research by the University of Kentucky Prevention Research Center and assessments conducted by local health departments.
- The Kentucky Department of Education (KDE) will coordinate with KDPH staff to strengthen and expand their capacity to plan, implement and evaluate strategies that improve health through the Coordinated School Health Program.



1.1bR. Reduce the percentage of Kentuckians age 18 and older who are either overweight or obese.

Reason for Revision: The definition for overweight changed after the original Healthy Kentuckians 2010 physical activity chapter was drafted. The current definition for overweight is a Body Mass Index (BMI) greater than or equal to 25 and less than 30. The current definition for obesity is a BMI greater than or equal to 30. The original objective 1.1 has been changed to two revised objectives 1.1aR. and 1.1bR. to reflect the new definition.

Data Source: Behavioral Risk Factor Surveillance System (BRFSS)

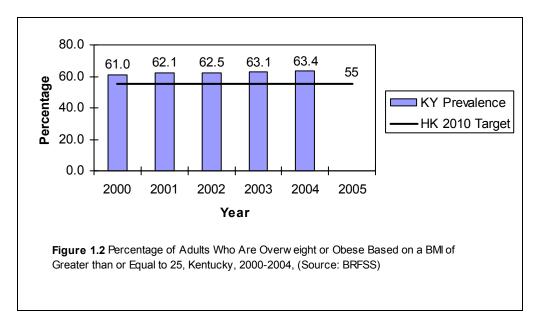
Baseline: 61 percent in 2000

HK 2010 Target: 55 percent

Mid-Decade Status: 63.4 percent in 2004

Strategies to Achieve Objective:

Similar to objectives for 1.1aR.



- 1.2. To increase to at least 50 percent the proportion of Kentuckians ages 18 and over who engage regularly in physical activity for at least 20 minutes 3 or more times a week. (See Revision)
- 1.2R. (REVISION) Increase to at least 35 percent the proportion of Kentuckians ages 18 and over who engage in moderate physical activity 5 or more days per week.

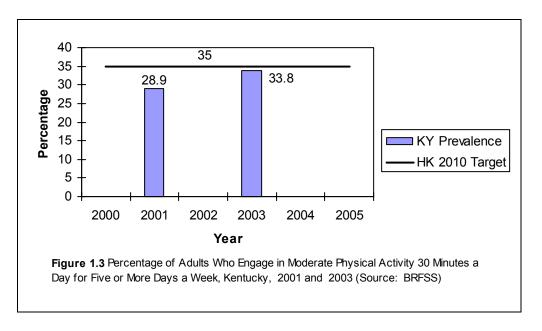
Reason for Revision: The definition of moderate physical activity was changed from 20 minutes three or more days per week to 30 minutes five or more days per week.

Data Source: BRFSS. The definition of moderate physical activity was changed in 2001.

Baseline: 28.9 percent in 2001

HK 2010 Target: 35 percent

Mid-Decade Status: 33.8 percent in 2003



Strategies to Achieve Objective:

- Implement the work plan specified in the KDPH KNPAP
- KDPH will sponsor physical activity conferences yearly.
- The American Heart Association will sponsor American Heart Walks at several locations throughout the state.
- KDPH will work with local health departments to implement walking programs.
- 1.3. To increase to at least 50 percent the proportion of overweight people ages 18 and over who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight. (See Revision)
- 1.3R. (REVISION) Decrease the percentage of Kentuckians reporting no leisure time physical activity (by BMI category, i.e., normal weight, overweight, obese class I, obese class II, obese class III).

Data Source: BRFSS

Baseline: 2001

Normal weight 29.6 percent BMI of 18.5 - 24.9 Overweight 30.7 percent BMI of 25.0 - 29.9 Obese Class I 38.7 percent BMI of 30.0 - 34.9 Obese Class II 45.6 percent BMI of 35.0 - 39.9 Obese Class III 46.8 percent BMI of 40 or greater

HK 2010 Target:

Normal weight 25.5 percent BMI of 18.5 – 24.9

Overweight	26.3 percent BMI of 25.0 – 29.9
Obese Class I	34.7 percent BMI of 30.0 – 34.9
Obese Class II	34.1 percent BMI of 35.0 – 39.9
Obese Class III	42.0 percent BMI of 40 or greater

Mid-Decade Status: 2004

Normal weight	26.5 percent BMI of 18.5 – 24.9
Overweight	27.3 percent BMI of 25.0 - 29.9
Obese Class I	35.7 percent BMI of 30.0 – 34.9
Obese Class II	35.1 percent BMI of 35.0 – 39.9
Obese Class III	43.0 percent BMI of 40 or greater

Strategies to Achieve Objective:

- See objectives for 1.1aR. and 1.2.
- 1.4. To increase to at least 20 percent the proportion of young people in grades K-12 who engage in moderate physical activity for at least 30 minutes on five or more of the previous seven days.
- 1.4R. To increase to at least 24 percent the proportion of young people in grades 9-12 who engage in moderate physical activity for at least 30 minutes on five or more of the previous seven days.

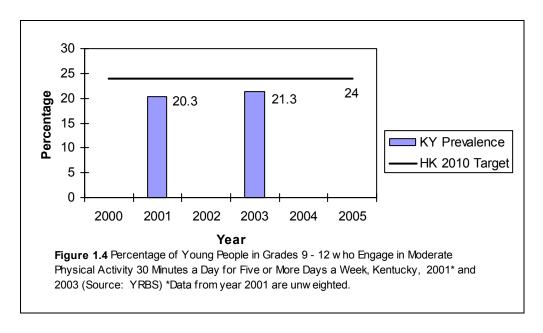
Reason for Revision: Data are not available for grades K through 8, and none is expected in the near future.

Data Source: Youth Risk Behavior Surveillance System (YRBSS). The definition for moderate physical activity is activity for thirty or more minutes on 5 or more of the previous 7 days. This type of moderate activity does not require heavy breathing or sweating (e.g. fast walking, slow bicycling, and skating).

Baseline: 20.3 percent in 2001

HK 2010 Target: 24 percent

Mid-Decade Status: 21.3 percent in 2003



Strategies to Achieve Objective:

- Use community assessments performed by local health departments and research performed by the University of Kentucky Prevention Research Center in the course of implementing the work plan specified in the KNPAP State Action Plan
- Analyze the Kentucky YRBSS data and additional data gathered through community assessments and the University of Kentucky Prevention Research Center by sex, race, and region to more effectively target efforts for intervention
- Encourage schools to have sports and physical education activities daily for every child four or five days a week
- Partner with public and private, for-profit and non-profit related organizations to affect policy and environment changes to encourage an increase in frequent, moderate physical activity among Kentuckians in grades K-12
- 1.5. (Developmental) Increase the proportion of the state's public and private elementary, middle/junior high and senior high schools that provide access to their physical activity spaces and facilities for young people and adults outside of normal school hours (i.e. before and after the school day, on weekends, and during summer and other vacations).

Data Source: School Policy Survey (Conducted by Kentucky DPH Tobacco Prevention and Control Program).

Baseline and Mid-Decade Status: 2003: 51 percent of middle and high schools allow students to use both inside and outside facilities after hours;

31 percent of middle and high schools allow public use of inside and outside facilities after hours.

HK 2010 Target: 56 percent of middle and high schools allow students to use both inside and outside facilities after hours; 34 percent of middle and high schools allow public use of inside and outside facilities after hours.

Data Needs: Continue data collection via survey

Strategies to Achieve Objective:

- Partner with public and private, for-profit and non-profit organizations to increase the proportion of Kentucky schools that provide access to their physical activity spaces and facilities for young people and adults outside of normal school hours
- 1.6. (Developmental) Increase the proportion of Kentucky worksites with 50 or more employees offering employer-sponsored physical activity and fitness programs.

Data Source: 2001 Kentucky Worksite Cardiovascular Health Survey

Baseline: 45 percent in 2001

HK 2010 Target: 50 percent

Mid-Decade Status: See baseline

Data Needs: Worksite survey needs to be repeated by 2006.

Strategies to Achieve Objective:

- Partner with public and private, profit and nonprofit organizations to increase the proportion of worksites with more than 50 employees that offer employer–sponsored physical activity and fitness programs
- 1.7. (Developmental) Increase the proportion of primary and allied health care providers who routinely assess and counsel their patients regarding their physical activity. (DELETED)

Reason for Deletion: No data source exits, and none is expected in the near future.

Terminology

BRFSS: Behavioral Risk Factor Surveillance System – An adult telephone survey cosponsored by the CDC and KDPH.

KNPAP: Kentucky Nutrition and Physical Activity Program

YRBSS: Youth Risk Behavior Surveillance System – CDC's survey for high school students in grades 9 to 12 done every two years.

References

- Kentucky Youth Risk Behavior Surveillance System, 2003
- Behavioral Risk Factor Surveillance System, 2000-2004

Contributors

- Colby Wagoner, MS. Physical Activity Coordinator, Kentucky Nutrition and Physical Activity Program to Prevent Obesity and Other Chronic Diseases, Department for Public Health, Chapter Coordinator
- Wendy Carlin, M.S. RD, LD., Program Director, Kentucky Nutrition and Physical Activity Program to Prevent Obesity and Other Chronic Diseases, Department for Public Health
- Fran Hawkins, M.S., RD, LD., Branch Manager, Nutrition Services Branch, Kentucky Department for Public Health
- Teri Wood, Ph.D. Epidemiologist, Chronic Disease Branch, Kentucky Department for Public Health
- Barbara Donica, MA, RN, Coordinated School Health Administrator, Division of Nutrition and Health Services, Kentucky Department of Education

1. Physical Activity and Fitness – Summary Table

Summary of Objectives	Baseline	HK 2010	Mid-	Progress	Data
for		Target	Decade		Source
Physical Activity and Fitness 1.1aR. Reduce overweight to a	38%	≤25%	Status 37.6%	Yes	BRFSS
prevalence of no more than 25 percent	(2000)	≥ 25 /0	(2004)	165	BRESS
among Kentuckians 18 and over.	(2000)		(2004)		
(Overweight for this objective is defined					
as a BMI greater than or equal to 25 and					
less than 30.)					
1.1bR. Reduce the percentage of	61.0%	≤55%	63.4%	No	BRFSS
Kentuckians 18 and older who are either	(2000)		(2004)		
overweight or obese. (The definition of	, ,		, ,		
"overweight or obese" for this objective is					
a BMI greater than or equal to 25.)					
1.2R. Increase to at least 30 percent the	28.9%	≥35%	33.8%	Yes	BRFSS
proportion of Kentuckians ages 18 and	(2001)		(2003)		
over who engage in moderate physical					
activity 5 or more days per week.	<u> </u>	105 50/	20.50/		BB500
1.3R. Decrease the percentage of	Normal	≤25.5%	26.5%	Yes	BRFSS
Kentuckians reporting no leisure time physical activity (by BMI category. i.e.	weight 29.6%		(2004)		
normal weight, overweight, obese class I,	(2001)				
obese class II, and obese class III).	Overweight	≤26.3%	27.3%	Yes	
,	30.7%	-20.070	21.070	. 00	
	Obese	≤34.7%	35.7%	Yes	
	Class I	2			
	38.7%				
	Obese	≤34.1%	35.1%	Yes	
	Class II				
	45.6%				
	Obese	≤42.0%	43.0%	Yes	
	Class III				
1.4P Increase to at least 24 percent the	46.8% 20.3%	≥24%	21.3%	Yes	YRBSS
1.4R. Increase to at least 24 percent the proportion of young people in grades 9-	(2001)	<24 70	(2003)	168	i KBSS
12 who engage in moderate physical	(2001)		(2003)		
activity for at least 30 minutes on five or					
more of the previous seven days.					
1.5. (Developmental) Increase the	51% of	≥56%	51%	N/A	School
proportion of the state's public and	middle and		(2003)		Policy
private elementary, middle/junior high,	high				Survey
and senior high schools that provide	schools				
access to their physical activity spaces	allow				
and facilities for young people and adults	access to				
outside of normal school hours.	students				
	after hours .(2003)				
		J		L	

Summary of Objectives for Physical Activity and Fitness	Baseline	HK 2010 Target	Mid- Decade Status	Progress	Data Source
	31% of middle and high schools allow access to the general public after hours (2003)	≥34%	31% (2003)	N/A	
1.6. (Developmental) Increase the proportion of Kentucky worksites with 50 or more employees offering employer-sponsored physical activity and fitness programs. 1.7. (DELETED)	45% (2001)	≥50%	45% (2001)	N/A	Worksite Survey

 $\label{eq:R} R = Revised \ objective \\ N/A = Only \ baseline \ data \ are \ available. \ Not \ able \ to \ determine \ progress \ at \ this \ time.$