

# Special Olympics Healthy Athletes



## A New Paradigm for the Delivery of Health and Wellness Services for Persons with Intellectual Disabilities

### Introduction

Persons with intellectual and developmental disabilities (I/DD) have a 40 percent greater risk of preventable secondary health conditions, such as obesity, poor fitness, nutritional deficits, untreated or poorly treated vision, dental, hearing and podiatric problems.

These disparities in health care result from lack of access and ability to pay for services, poor knowledge of practitioners, and poorly developed and supported behaviors to promote health.

### Methods

Special Olympics Healthy Athletes® was developed in 1996 to begin to address these health disparities. Healthy Athletes is a program designed to help Special Olympics athletes improve their health and fitness, leading to enhanced sports experience and improved well-being.

The mission of Healthy Athletes is to improve athletes' ability to train and compete in Special Olympics. Athletes receive a variety of health screenings and services in a series of clinics conducted in a welcoming, fun environment.

Health care professionals and students are trained to provide the screenings in an effort to educate the professional community about the health needs and abilities of persons with intellectual and developmental disabilities.

### Opening Eyes® (Initiated 1991, Lions Clubs support 2000)

- Provides vision screening services for athletes
- Provides refractive testing
- Fabricates eyeglasses as indicated
- Provides sunglasses and protective eyewear
- More than 45,775 athletes screened since 1991
- 66% of athletes have not had a vision exam in three years
- 37% of athletes screened needed corrective lenses
- 18% of athletes screened worldwide have an ocular pathology
- 33% of these athletes have a serious condition

### Special Smiles® (1993)

- Screens the teeth, gums, tongue and mouth
- Educates about correct brushing and flossing
- Teaches the importance of diet to oral health
- Fabricates custom mouth-guards for contact sports
- Refers to community providers for necessary dental care
- More than 20,000 athletes screened in 2003 alone
- Approximately 33% of athletes have untreated tooth decay
- Approximately 12% of athletes have oral pain
- Approximately 43% of athletes have periodontal (gum) disease.

### FUNfitness (1999)

- Surveys general exercise habits
- Assesses flexibility, functional strength and balance
- New assessment of aerobic fitness in 2005
- Educates in home exercises to improve performance
- Provides simple exercise tools
- Facilitates community referral as needed
- More than 6,000 athletes screened since 1999
- Gender and age differences noted in all tests
- 40-60% of athletes have tight hamstrings
- >60% have inadequate calf flexibility for activity
- 18-60% have weak abdominal muscles
- >50% have poor balance

### Healthy Hearing (2000)

- Screens hearing acuity
- Creates custom swim plugs
- Makes minor repairs on hearing aids
- Consults on hearing aids, noisy environments
- Recommends medical or audiological evaluations
- More than 10,459 athletes screened since 2000
- Consistently, 30% of athletes do not pass the screening, indicating potential hearing loss
- Of the 30% who did not pass
  - 50% have indication of middle ear problems
  - 50% have likely sensorineural hearing loss

### Health Promotion (2000)

- Content varies with the health needs of the population, e.g., U.S. Programs have focused on nutrition (prevention of obesity), hydration, skin protection, tobacco avoidance and bone health.
- Empowers and motivates athletes to make good lifestyle choices that will improve their long-term health—using interactive educational games, literature
- Health screenings at Games include BMI and BMD measurements
- Seeks to find the best ways to convey and reinforce key concepts and information to people with ID, to encourage healthy lifestyle choices.
- Pilot community-based programs underway to promote year-round fitness and good nutrition – to improve health endpoints (viz. obesity, diabetes, heart disease, osteoporosis), positive self-image and quality of life.
- Has interacted with 3,000 athletes at Games and in the community
- >20% of athletes tested at 2003 World Games had low bone densities (BMD)
- 56% of athletes at 2003 World Games had BMI > 24
- Most athletes have suboptimal diets and hydrate with fluids such as soft drinks

### Fit Feet (2003)

- Evaluate the skin, nails, bones and joints of the feet
- Examine the function of the feet and gait
- Examine the shoes and socks of athletes
- Many athletes have severe pronation
- Those with pronation have associated flatfoot deformities
- Many athletes have onychomycosis, or nail fungus

### Acknowledgments

Project supported by Special Olympics, Inc., and The Centers for Disease Control and Prevention, Grant # U59/CCU321826-03

### Impact

- More than 250 Healthy Athletes screening events were conducted in 2003 in 48 U.S. states and 55 countries in seven global regions.
- More than 55,000 athletes received some type of health screening and education in 2003.
- Parents and coaches have been educated along with their athletes.
- More than 475 health care professionals have been trained as state and country coordinators for the events.
- More than 7,500 health care professionals have experienced the joy and reward of Special Olympics.
- Data from the Healthy Athletes venues are being entered into a Web-based system to constitute the largest database of health data in existence.

### I CAN BE HEALTHY, I CAN WIN...



Opening Eyes



Special Smiles



Healthy Hearing



Fit Feet



FUNfitness



Health Promotion