## Global Comparison

**Healthy Athletes exam results, 2008-2018**

<table>
<thead>
<tr>
<th></th>
<th>Global</th>
<th>USA</th>
<th>SOWA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td><strong>Special Smiles Total</strong></td>
<td>100.0</td>
<td>240,767</td>
<td>100.0</td>
</tr>
<tr>
<td>Mouth Pain*</td>
<td>14.5</td>
<td>33,802</td>
<td>11.7</td>
</tr>
<tr>
<td>Untreated Tooth Decay*</td>
<td>36.7</td>
<td>83,643</td>
<td>25.4</td>
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<tr>
<td>Missing Teeth*</td>
<td>28.1</td>
<td>64,659</td>
<td>29.4</td>
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<tr>
<td>Gingival Signs*</td>
<td>46.0</td>
<td>105,001</td>
<td>46.5</td>
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<tr>
<td>Urgent Dental Referral*</td>
<td>14.2</td>
<td>32,287</td>
<td>9.0</td>
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<tr>
<td><strong>Fit Feet Total</strong></td>
<td>100.0</td>
<td>106,878</td>
<td>100.0</td>
</tr>
<tr>
<td>Gait Abnormalities</td>
<td>58.7</td>
<td>53,347</td>
<td>64.4</td>
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<tr>
<td>Bone Deformation</td>
<td>26.4</td>
<td>23,111</td>
<td>28.7</td>
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<tr>
<td>Skin/Nail Conditions</td>
<td>50.2</td>
<td>51,921</td>
<td>43.1</td>
</tr>
<tr>
<td><strong>Opening Eyes Total</strong></td>
<td>100.0</td>
<td>183,493</td>
<td>100.0</td>
</tr>
<tr>
<td>Never Had an Eye Exam*</td>
<td>21.2</td>
<td>28,426</td>
<td>3.9</td>
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<tr>
<td>Eye Disease</td>
<td>16.2</td>
<td>29,798</td>
<td>16.6</td>
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<tr>
<td>Needed new Rx</td>
<td>36.7</td>
<td>67,302</td>
<td>47.1</td>
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<tr>
<td><strong>Healthy Hearing Total</strong></td>
<td>100.0</td>
<td>107,671</td>
<td>100.0</td>
</tr>
<tr>
<td>Blocked or Partially Blocked Ear Canal</td>
<td>39.9</td>
<td>42,950</td>
<td>41.5</td>
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<tr>
<td>Failed PureTone Hearing Test</td>
<td>24.9</td>
<td>26,832</td>
<td>27.7</td>
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<tr>
<td>Permanent Hearing Loss</td>
<td>7.1</td>
<td>7,655</td>
<td>7.9</td>
</tr>
<tr>
<td><strong>Health Promotion Total</strong></td>
<td>100.0</td>
<td>143,761</td>
<td>100.0</td>
</tr>
<tr>
<td>Low Bone Density (adults)*</td>
<td>27.8</td>
<td>5,667</td>
<td>26.2</td>
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<tr>
<td>Obese (child)*</td>
<td>16.2</td>
<td>9,986</td>
<td>32.4</td>
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<tr>
<td>Overweight (child)*</td>
<td>14.7</td>
<td>9,087</td>
<td>17.4</td>
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<tr>
<td>Underweight (child)*</td>
<td>10.7</td>
<td>6,604</td>
<td>5.4</td>
</tr>
<tr>
<td>Obese (adult)*</td>
<td>32.2</td>
<td>22,056</td>
<td>46.2</td>
</tr>
<tr>
<td>Overweight (adult)*</td>
<td>27.9</td>
<td>19,137</td>
<td>28.1</td>
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<tr>
<td>Underweight (adult)*</td>
<td>5.0</td>
<td>3,436</td>
<td>2.6</td>
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<tr>
<td>Use Tobacco Products*</td>
<td>7.8</td>
<td>9,585</td>
<td>6.1</td>
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<tr>
<td>Exposure to Second Hand Smoke*</td>
<td>37.9</td>
<td>41,859</td>
<td>35.7</td>
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<tr>
<td><strong>Fun Fitness Total</strong></td>
<td>100.0</td>
<td>105,441</td>
<td>100.0</td>
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<tr>
<td>Flexibility Problems Identified*</td>
<td>62.0</td>
<td>65,364</td>
<td>70.9</td>
</tr>
<tr>
<td>Strength Problems Identified*</td>
<td>55.8</td>
<td>58,878</td>
<td>54.7</td>
</tr>
<tr>
<td>Balance Problems Identified*</td>
<td>66.6</td>
<td>70,246</td>
<td>72.8</td>
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<tr>
<td><strong>Exercise Frequency</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 or More Days Most Weeks</td>
<td>53.2</td>
<td>47,483</td>
<td>65.9</td>
</tr>
<tr>
<td>Less Than 3 Days Most Weeks</td>
<td>38.4</td>
<td>34,296</td>
<td>28.9</td>
</tr>
<tr>
<td>No Regular Exercise Program</td>
<td>8.4</td>
<td>7,452</td>
<td>5.2</td>
</tr>
</tbody>
</table>

n = number with each health condition

*Percentages based on number of athletes who completed particular test or answered particular question

For more information, please send an email to healthdata@specialolympics.org
When comparing the prevalence rates of a number of health indicators in Special Olympics athletes to those in the general population, disparities become evident. One of the largest discrepancies exists in obesity. In Special Olympics athletes, 31% of the adult population globally were obese compared to 13% of the general population. However, within the United States, a higher percentage of adult SO athletes were sufficiently active compared to the general population.

Table A. Comparative health indicators for Special Olympics athletes and the general population (2008-2018)

<table>
<thead>
<tr>
<th>Health Indicator</th>
<th>General Population, US (%)</th>
<th>Special Olympics Athletes, SOWA (%)</th>
<th>Special Olympics Athletes, US (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Untreated Tooth Decay</td>
<td>27.0&lt;sup&gt;2&lt;/sup&gt;</td>
<td>24.2</td>
<td>25.4</td>
</tr>
<tr>
<td>Missing Teeth&lt;sup&gt;3&lt;/sup&gt;</td>
<td>52.0&lt;sup&gt;3&lt;/sup&gt;</td>
<td>27.8</td>
<td>29.4</td>
</tr>
<tr>
<td>Obesity (BMI≥30) (20+)</td>
<td>30.4&lt;sup&gt;4&lt;/sup&gt;</td>
<td>51.5</td>
<td>46.2</td>
</tr>
<tr>
<td>Sufficient Aerobic activity (3 or more days per week)</td>
<td>49.7&lt;sup&gt;6&lt;/sup&gt;</td>
<td>66.3</td>
<td>65.9</td>
</tr>
<tr>
<td>Insufficient Aerobic activity (1-2 days per week)</td>
<td>19.9&lt;sup&gt;7&lt;/sup&gt;</td>
<td>25.2</td>
<td>28.9</td>
</tr>
<tr>
<td>Inactive - Aerobic activity (No days per week)</td>
<td>30.4&lt;sup&gt;8&lt;/sup&gt;</td>
<td>2.5</td>
<td>5.2</td>
</tr>
<tr>
<td>Balance Problems</td>
<td>35.4&lt;sup&gt;9&lt;/sup&gt;</td>
<td>64.2</td>
<td>72.8</td>
</tr>
<tr>
<td>Skin/Nail Conditions</td>
<td>27.0&lt;sup&gt;9&lt;/sup&gt;</td>
<td>37.6</td>
<td>43.1</td>
</tr>
</tbody>
</table>


<sup>1</sup> 2008-2018 timeframe is for SO data and does not necessarily mean the general population data corresponds to the same time.
<sup>2</sup> SO athletes often have many missing teeth and it is possible the metrics for the general population may reflect more people with 1 or 2 missing teeth.
37.6% of athletes have skin and nail conditions

30.0% of athletes needed a new prescription

51.5% of adult athletes are obese

29.2% of athletes have blocked or partially blocked ear canals

51.5% of adult athletes are obese

78.2% of athletes have flexibility problems

29.2% of athletes have blocked or partially blocked ear canals

46.6% of athletes have gingival signs

134 athletes attended their first Strong Minds screening in 2018.

534 Healthy Athletes screenings completed in 2018.
1. Increase access to eye care for Special Olympics athletes, as well as all people with intellectual disabilities.

2. Raise eye care professionals’ awareness of vision and eye health concerns of people with special needs, including difficulties involved in accessing treatment.

3. Train healthcare professionals, students and others about the needs and care management of people with intellectual disabilities.

4. Develop a body of knowledge about vision and eye health of children and adults with special needs.

Screenings led by 3 Clinical Directors:
Erick Hartman, OD
Katie Hash, OD
Michelle Carle, MD

Through the global partnership of Special Olympics and Lions Clubs International Opening Eyes, Special Olympics athletes receive extensive vision and eye health tests, refraction for those requiring further exam, prescription eyeglasses, protective sports eyewear (either with a prescription or simply protective), and evaluation for referral for follow-up care through Opening Eyes.

Screening Results

- 3.3% have never had an eye exam
- 23% have an eye disease
- 30.0% needed a new prescription
At Health Promotion, physicians, nurses, nutritionists and health educators provide clinical screenings in bone density, blood pressure, and BMI and provide education in areas such as nutrition, sun safety, and tobacco cessation, targeting the athletes’ needs. Health Promotion is designed to convey and reinforce key concepts on healthy living, healthy lifestyle choices, and locally-specific health issues.

**Goals**

1. Encourage and enhance healthy behaviors, and reduce risky behaviors, related to chronic disease prevention, as well as locally-specific health issues; improve self-efficacy and self-advocacy of people with intellectual disabilities around health and wellness.
2. Provide training and educational opportunities through screening events for allied health providers to learn how to provide quality care and wellness programming to individual with intellectual disabilities.
3. Develop a body of knowledge about the overall health and wellness of children and adults with intellectual disabilities.

**Screening Results**

- 26.6% of adults are overweight
- 51.5% of adults are obese
- 28.9% of adults have low bone density
- 13.7% of children are overweight
- 35.3% of children are obese
- 40.3% are exposed to second hand smoke
- 10.3% use tobacco products

140 athletes screened in 2018

Screenings led by 4 Clinical Directors:
- Susanna Block, MD, MPH
- Jenny Pang, MD
- Julie Larsen, RDN
- Abby Pattison, RD
Healthy Hearing is designed to assess and report the prevalence of hearing loss among Special Olympics athletes as a means of focusing attention on the hearing needs of people with intellectual disabilities. Additionally, Healthy Hearing identifies athletes with hearing loss and ear health problems through hearing testing; notifies/counsels them about needed follow-up care; and whenever possible, provides follow-up care on site at Special Olympics events.

Screenings led by 5 Clinical Directors:
Susan Porter, AuD
Mihwa Kim, AuD
Leah Martin, AuD
Grace Kim, MD
Lisa Illich, MCSD

Goals
1. Increase access to ear and hearing care for Special Olympics athletes, as well as all people with intellectual disabilities.
2. Raise hearing health professionals’ awareness of the ear and hearing concerns of people with special needs, including difficulties involved in accessing care.
3. When possible, provide a list of regional hearing health professionals who care for people with special needs to all athletes who participate in Healthy Hearing.
4. Develop a body of knowledge about the ear canal hygiene of children and adults with intellectual disabilities.
5. Train healthcare professionals, students and others about the needs and care management of people with intellectual disabilities.

Screening Results

- 29.2% have a blocked or partially blocked ear canal
- 23.0% failed PureTone hearing test
- 6.8% have permanent hearing loss
Special Olympics developed the Fit Feet discipline to evaluate foot and ankle deformities. Athletes receive foot and ankle screenings, are checked for proper shoes and socks, and receive education in proper footwear and care of the feet and toes.

Goals

1. Increase access to foot care for Special Olympics athletes, as well as all people with intellectual disabilities.
2. Raise foot care specialists’ awareness of foot concerns of people with special needs, including difficulties involved in accessing treatment.
3. Provide a list of regional foot care specialists who care for people with special needs to all athletes who participate in the Special Olympics Fit Feet program.
4. Develop a body of knowledge about proper foot care of children and adults with special needs.
5. Insure appropriate footwear with regards to the sport in which an athlete is participating as well as fit and comfort.
6. Train healthcare professionals, students, and others about the needs and care management of people with intellectual disabilities.

Screening Results

- 36.2% have gait abnormalities
- 37.6% have skin or nail conditions
- 21.4% have bone deformation
FUNfitness provides fitness screenings and education services. FUNfitness, developed in collaboration with the American Physical Therapy Association, provides an assessment of:

- flexibility of hamstring, calf, shoulder rotator and hip flexor muscles;
- strength of the abdominal, lower and upper extremity muscles;
- static and dynamic balance;
- and aerobic fitness.

### Goals
1. Improve athletes’ ability to train and compete in Special Olympics and improve the overall fitness of people with intellectual disabilities.
2. Train healthcare professionals, students and others about the needs and care management of people with intellectual disabilities.
3. Collect, analyze and disseminate data on the health and fitness status and needs of people with intellectual disabilities.
4. Advocate for improved health and wellness policies and programs for people with intellectual disabilities.

### Screening Results
- **78.2%** have flexibility problems
- **64.2%** have balance problems
- **53.1%** have strength problems
- **66.3%** exercise 3 or more days most weeks
- **25.2%** exercise less than 3 days most weeks
- **2.5%** have no regular exercise program

25 athletes screened in 2018

Screenings led by 6 Clinical Directors:
Natasja Ysambart, DPT
Pam Rock, PT
Matt Harnpadoungsataya, DPT
Laura Johnstone, MPT
Penny Coyner, PT, MPT, PCS
Dustin Ellzey, PT
Special Smiles provides Special Olympics athletes with an oral health screening, education about the importance of good oral hygiene habits, instructions in correct tooth brushing and flossing methods, and refers athletes to potential sources of treatment and follow-up care.

**Goals**

1. Increase access to dental care for Special Olympics athletes, as well as all people with intellectual disabilities.
2. Raise dental professionals’ awareness of the oral health concerns of people with special needs, including difficulties involved in accessing care.
3. Train healthcare professionals, students and others about the needs and care management of people with intellectual disabilities.
4. Develop a body of knowledge about the oral healthcare needs of children and adults with intellectual disabilities.
5. Provide a list of regional dental professionals who care for people with special needs to all athletes who participate in Special Smiles.

**Screening Results**

- **15.1%** have mouth pain
- **24.2%** have untreated tooth decay
- **46.6%** have gingival signs
- **8.4%** received an urgent dental referral
- **27.8%** have missing teeth

121 athletes screened in 2018

Screenings led by 9 Clinical Directors: Jessica DeBord, DDs Travis Nelson, DDS, MSD, MPH Donna Quinby, DMD, MSD Aarika Anderson-Elter, DMD Ashland Doomes, DMD Kari Sims, DDS, MSD Ara Greer, DDS Kim Espinoza, DDS Takish Ziad, DDS
Goals
1. Increase athlete awareness of active coping strategies that can be used in competition and in life.
2. Help athletes to identify ways to manage stress during competition and in daily life.
3. Provide resources on good coping for athletes, coaches & caregivers.
4. Start conversations about stress, coping and emotional wellness.
5. Provide training and experiences for health student and professionals to discuss emotional well-being with individuals with Intellectual Disabilities.

Strong Minds is an interactive learning activity focused on developing adaptive coping skills. Competition provides a natural opportunity to develop active strategies for maintaining emotional wellness under stress, such as: thinking positive thoughts, releasing stress and connecting with others. Athletes learn about and try a few different active coping strategies as they move through the stations. Before exiting, athletes identify the strategies they like best and volunteers provide them with visual reminders to use these tools in competition and in daily life.

National Screening Results
- 12.0% have no coping strategies
- 62.0% use avoidant coping strategies
- 21.4% use active coping strategies

Screenings led by 2 Clinical Directors:
Megan Gary, MD
Kara Rice, LICSW

134 athletes screened in 2018
In July of 2018, Seattle hosted the 2018 Special Olympics USA Games. Special Olympics Washington’s Clinical Directors advised and led each discipline at Healthy Athletes at USA Games, where 1,770 athletes participated in a total of 5,997 screenings.

Team Washington’s delegation of 137 athletes had a 100% attendance rate at Healthy Athletes at USA Games, completing a total of 504 screenings.

In preparation for USA Games, Team Washington athletes participated in Special Olympics Washington’s Fit 5 program to improve their health and athletic performance. Team Washington athletes lost on average nearly 10 pounds while participating in the Fit 5 program from February to July of 2018. Team Washington athletes also saw improvements in blood pressure, which is especially significant to note given the short period of time that athletes were participating in Fit 5. Additionally, Team Washington athletes who started Fit 5 with “high risk” blood pressure levels saw an even greater improvement in their blood pressure by July of 2018. Nationally, all USA Games athletes participating in a fitness program showed an increase in fruit and vegetable consumption, daily water intake and weekly exercise frequency.

**Average of 10 pounds lost**

**1.6% of athletes saw BP move to normative range**

**29.2% of athletes saw improvements in hypertensive BP**
Healthy Communities

269 athletes participating in 8 weeks of fitness and nutrition programming

Fit 5
Fit 5 is implemented weekly at team practice. Athletes have three simple goals: drink 5 bottles of water a day, eat 5 servings of fruits and vegetables a day, and exercise 5 times a week.

SOfit
SOfit is implemented weekly at school or in a club. The program focuses on four kinds of wellness: nutritional, physical, emotional, and social. Each session of SOfit includes educational activities and physical activity.

TeamBuildr
TeamBuildr is designed for individual athletes that are looking for sport specific training plans to build strength, endurance, and speed.

191 clinical and wellness professionals trained on providing care and education to people with intellectual disabilities through volunteering
# What to Expect in 2019

## Healthy Athletes Screenings

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturday, March 2(^{nd})</td>
<td>Wenatchee</td>
<td>FUNfitness Health Promotion Special Smiles Fit Feet</td>
</tr>
<tr>
<td>Saturday, April 20(^{th})</td>
<td>Shoreline</td>
<td>Health Promotion</td>
</tr>
<tr>
<td>Saturday, April 27(^{th})</td>
<td>Yakima</td>
<td>Health Promotion</td>
</tr>
<tr>
<td>Friday, May 3(^{rd})</td>
<td>Spokane</td>
<td>Health Promotion</td>
</tr>
<tr>
<td>Saturday, June 1(^{st})</td>
<td>Tacoma</td>
<td>FUNfitness Healthy Hearing Special Smiles Strong Minds</td>
</tr>
<tr>
<td>Saturday, July 27(^{th})</td>
<td>Olympia</td>
<td>Special Smiles</td>
</tr>
<tr>
<td>Saturday, August 17(^{th})</td>
<td>Everett</td>
<td>FUNfitness Healthy Hearing Opening Eyes Special Smiles Strong Minds</td>
</tr>
<tr>
<td>Saturday, November 30(^{th})</td>
<td>Tri - Cities</td>
<td>Opening Eyes Special Smiles Fit Feet</td>
</tr>
</tbody>
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