Clinical Director's Handbook

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Dear Healthy Hearing Clinical Director,

We are delighted to know you are interested in the Special Olympics Healthy Hearing Program. The purpose of this handbook is to provide you with the necessary information to assist you in planning and implementing a successful Healthy Hearing event.

This manual provides general information about Special Olympics, the different Programs offered by Special Olympics, followed by information needed to prepare and conduct a Healthy Hearing event. Please review this handbook as you prepare for a Healthy Hearing event.

Kind regards, Melina & Beth

Melina Willems
Beth Lannon
Audiologists

Global Clinical Advisors
Special Olympics Healthy Hearing
**Intellectual Disability:**

**What is an Intellectual Disability?**

Intellectual disability (ID) is a term used when a person has certain limitations in cognitive functioning and skills, including communication, social and self-care skills. These limitations can cause a child to develop and learn more slowly or differently than a typically developing child. Intellectual disability can happen any time before a child turns 18 years old, even before birth.

Intellectual disability is the most common developmental disability.

According to the American Association of Intellectual and Developmental Disabilities (AAIDD), an individual has an ID if they meet three criteria:

- IQ below 70-75
- a significant limitation in two or more adaptive areas (= skills that are needed to live, work, and play in the community, such as communication or self-care)
- the condition manifests itself before the age of 18.

**What can cause an Intellectual Disability?**

ID can be caused by injury, disease, or a problem in the brain. For many children, the cause of their ID is unknown.

Some causes of ID, such as Down syndrome, Fetal Alcohol Syndrome, Fragile X syndrome, birth defects, and infections, can happen before birth. Some happen while a baby is being born or soon after birth.

Other causes of ID do not occur until a child is older. These might include severe head injury, infections or stroke.
What are the most common causes of an Intellectual Disability?

The most common causes of ID are:

**Genetic conditions:** Sometimes an ID is caused by abnormal genes inherited from parents, errors when genes combine, or other reasons. Examples of genetic conditions are Down syndrome, Fragile X syndrome, and phenylketonuria (PKU).

**Complications during pregnancy:** An ID can result when the baby does not develop inside the mother properly. For example, there may be a problem with the way the baby's cells divide. A woman who drinks alcohol or gets an infection like rubella during pregnancy may also have a baby with an ID.

**Problems during birth:** If there are complications during labour and birth, such as a baby not getting enough oxygen, they may develop an ID.

**Diseases or toxic exposure:** Diseases like whooping cough, the measles, or bacterial meningitis can cause an ID. They can also be caused by extreme malnutrition, not getting appropriate medical care, or by being exposed to poisons like lead or mercury.

We know that an ID is not contagious: you can’t catch an ID from anyone else. We also know it’s not a type of mental illness, like depression. There are no cures for ID. However, children with an ID can learn to do many things. They may just need take more time or learn differently than other children.

**How common is ID?**

Approximately 6.5 million people in the United States have an ID. According to the World Health Organization (WHO) approximately 1 to 3% of the global population has an ID, which is as many as 200 million people worldwide.

ID is significantly more common in low-income countries: 16.41 in every 1,000 people. Disabilities overall are more common in low-income countries. The United Nations Development Program estimates that 80% of all people with disabilities live in low-income countries. While people with disabilities represent approximately one in 10 people worldwide, they are one in every five of the world’s poorest people.
Special Olympics: More than Sports

Healthy Communities:

In order to help athletes achieve their best performances on and off the field, more and more SO Programs are providing year round on-going wellness opportunities, follow-up health care, education and support for athletes, families and the public as part of the Healthy Communities (HC) model made possible by the Golisano Foundation.

The ultimate goal of the HC project is to increase access to health care and resources for people with ID, and increase their health status.

The criteria to become a HC are:

➢ 70% of athletes who receive referrals at the Healthy Athletes Program (HAP) have a place to go for follow-up care following a HAP examination.
➢ Programs offer health and wellness programming for athletes outside of HAP-events involving partners, coaches and/or families as appropriate.
➢ Sufficient sustainable resources to achieve the above criteria and deliver the project.

It’s thanks to the Golisano Foundation that the HC projects are possible. In 2012, Tom Golisano donated $12 million to launch the SO Healthy Communities (HC) initiative over a 4 years period. In 2015, the Golisano Foundation gave $25 million to grow SO Health work, including scaling the HC model to 100 SO Programs by 2020.
Unified Schools:

Unified Schools is an education and sports based strategy powered by an engaged youth community that increases athletic and leadership opportunities for students with and without ID, while creating communities of acceptance for all.

Unified Sports:

Dedicated to promoting social inclusion through shared sports training and competition experiences, Unified Sports joins people with and without ID on the same team. In Unified Sports, teams are made up of people of similar age and ability, which makes practices more fun and games more challenging and exciting for all. Having sport in common is just one more way that preconceptions and false ideas are swept away.
Young Athletes Program:

Young Athletes™ (YA) is a unique sport and play program for children with ID. The focus is on fun activities that are important to mental and physical growth.

Children ages 2 to 7 enjoy games and activities that develop motor skills and hand-eye coordination. YA is an early introduction to sports and to the world of SO. The children learn new things, play and have lots of fun!

Unified Leadership:

Through sports training and competitions, SO helps people with ID achieve joy, acceptance and success. They gain the confidence that comes with achievement. They feel empowered. The Athlete Leadership Programs can take athletes even farther - as leaders and spokespeople respected in their communities.

The athletes can become mentors for other athletes. They can train to become coaches and officials. They can also move toward a more public role as a speaker or spokesperson, telling audiences and journalists about the remarkable changes that SO helped bring to their lives.
**Healthy Athletes Program:**
The Healthy Athletes Program (HAP) is dedicated to providing health services and education to SO athletes, and changing the way health systems interact with people with intellectual disabilities.

The HAP’s influence is evident with more than 136,000 healthcare professionals trained, free health examinations provided to more than 1.6 million athletes, and 100,000 free pairs of eyeglasses given to athletes. HA continues to grow each year with help from a global network of volunteers, in-kind donations and other financial support. HA is part of SO global health program.
Healthy Athletes Program:

Objectives:

➢ To signal problems, to refer if necessary, and to advise the athletes / coaches / caregivers
➢ To improve, through better health and fitness, each athlete’s ability to train and compete in SO
➢ To collect and analyze data, and to communicate about the health conditions and needs of people with ID
➢ To raise public and professional awareness of the health care problems that people with ID face
➢ To improve access and health care for people with ID
➢ To train and educate health care professionals and students about the special needs of, the care for, and how to communicate with people with ID

Fit Feet:

Special Olympics Fit Feet offers podiatric screenings to evaluate ankles, feet, lower extremity biomechanics, and proper shoe and sock gear to participating athletes. Fit Feet helps Special Olympics athletes step lively on the playing field, and in everyday life. Many athletes suffer from foot and ankle pain, or deformities that impair their performance. In fact, up to 50 percent of Special Olympics athletes experience one or more preventable or treatable foot conditions that can affect their sports participation. Often, these individuals are not fitted with the best shoes and socks for their particular sport. During Fit Feet events, volunteer podiatrists work with athletes to evaluate problems of the feet, ankles and lower extremity biomechanics.
**FUNFitness:**

FUNfitness is the physical therapy discipline of Special Olympics Healthy Athletes® that addresses the ongoing health needs of Special Olympics (SO) athletes. FUNfitness provides athletes the opportunity to be screened for flexibility of hamstring, calf, shoulder rotator and hip flexor muscles; functional strength of the abdominal and lower extremity muscles; and balance. During these screenings physical therapists, physical therapist assistants, and physical therapist or physical therapist assistant students work with athletes and coaches to improve optimal function in sports training and competition, prevention of or reduced risk for injury and recommending exercises and other helpful strategies.

**Health Promotion:**

Health Promotion, a discipline of Special Olympics Healthy Athletes, focuses on healthy living, healthy lifestyle choices, and nation-specific health issues. In addition to health education activities, health Promotion offers screenings for bone density, blood pressure, and body mass index (BMI). Its goals include encouraging and enhancing healthy behaviours and improving self-efficacy and self-advocacy.
Healthy Hearing:

The Healthy Hearing discipline of Healthy Athletes provides comprehensive hearing examinations and follow-up recommendations information. The main goals of this program are to inform athletes, parents, coaches or caregivers about the detection of possible ear and hearing problems, recommend follow-up as needed, and to advise about the necessity of regular ear and hearing screening.

MedFest:

MedFest was created to offer the physical exam that all athletes need prior to participating in Special Olympics sports programming. It is sometimes the first exposure these athletes have to medical care. In many cases, life-threatening conditions have been found and subsequently treated thanks to MedFest. Led by volunteer physicians, nurses, physician assistants, and medical students, the MedFest screening consists of the following stations: medical history, height and weight, blood pressure, cardiology test, musculoskeletal test, orthopedic tests, abdominal evaluation, and a check out station.
Lions Club International Opening Eyes:

Opening Eyes is changing lives in communities across the globe, providing free eye assessments, prescription eyewear, sunglasses and sports goggles to people with intellectual disabilities. The Special Olympics-Lions Clubs International Opening Eyes program is a vision and eye health screening in partnership with the Lions Clubs International Foundation. Led by volunteer vision care professionals, Opening Eyes is able to offer prescription eyewear, sunglasses, and sports goggles to Special Olympics athletes.

Special Smiles:

The Special Smiles discipline of Healthy Athletes provides comprehensive oral health care information, including offering free dental screenings and instructions on correct brushing and flossing techniques to participating Special Olympics athletes. This resource page is equipped with manuals and forms, event resources and Special Smiles stories and additional information. Special Smiles has demonstrated remarkable success in creating awareness and improving access to dental care for children and adults with intellectual disabilities.
**Strong Minds:**

Strong Minds helps Special Olympics athletes strengthen their coping skills. Competition provides a natural opportunity to develop active strategies for maintaining emotional wellness under stress, such as: thinking positive thoughts, practicing calming routines, and connecting with others. Athletes try a few different strategies as they move through the station. Before exiting, athletes identify the strategies they like best, and volunteers provide them with visual reminders to use these tools in competition and in real life.
References:

American Association of Intellectual and Developmental Disabilities
Centers for Disease Control and Prevention
National Center on Birth Defects and Developmental Disabilities
Special Olympics International website
United Nations Development Program
World Health Organization
Acknowledgement

The Healthy Hearing Program wouldn’t be possible without the many Healthy Hearing Clinical Directors who, for the benefit of our athletes’ health, give a part of their valuable time and experience.

A word of thanks to our Healthy Hearing Manager, Meggin van der Hilst, who has been a tremendous help to us and the program.

Melina Willems
Beth Lannon
Healthy Hearing Global Clinical Advisor
January 2019
Special Olympics Healthy hearing Train-The-Trainer

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      viii. Return of materials and supplies
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8. Extras
SO-related links

**Special Olympics International:**

http://www.specialolympics.org/

**More than sports:**

Inclusive Health: https://www.specialolympics.org/our-work/inclusive-health

Unified Schools: https://www.specialolympics.org/our-work/unified-schools


Young Athletes Program: http://www.specialolympics.org/young-athletes/

Unified Leadership: http://www.specialolympics.org/Sections/What_We_Do/Athlete_Leadership.aspx

**How to speak to people with disabilities:**


**Healthy Hearing:**

[HH resources page](http://resources.specialolympics.org/Taxonomy/Health/_Catalog_of_Healthy_Hearing.aspx)

HH equipment request form:
https://specialolympics.qualtrics.com/jfe/form/SV_1YtUeQByq2OuS7b

HH data requests:
healthdata@specialolympics.org

HH HAS data system:
https://has.specialolympics.org/healthone

HH post event report:
https://specialolympics.qualtrics.com/jfe/form/SV_4Ixj6hQb8vErnZH

HH videos:

- 12 minute video for training purposes:
  https://www.youtube.com/watch?v=OfpAGrFhK64&feature=youtu.be

- 1 minute promotional video:
  https://www.youtube.com/watch?v=hRLHkf_4D6o
HH Equipment Request Form

https://specialolympics.qualtrics.com/jfe/form/SV_1YtUeQBvg2OuS7b

Content:

- Event information
- HH CD information
- Need by date
- OAE tips request (S, M and L)
- OAE-units needed
- Tympanometers needed
- Audiometers needed
- Voltage requirements
- Local screening equipment availability
- Shipping information (name + address)
- Extra requirements: SOI custom letter, commercial invoice, ...
- Comments
Requesting Healthy Hearing Equipment

Please make your request for Healthy Hearing equipment at least 90 days prior to your event and use the following link for requesting equipment:

https://specialolympics.qualtrics.com/jfe/form/SV_1YtUeQByg2OuS7b

This link above can also be found on the Healthy Hearing resources page

DETAILED INSTRUCTIONS: Contact Meggin van der Hilst, Senior manager of Healthy Hearing for all communications concerning your equipment request (mvanderhilst@specialolympics.org). Please DO NOT contact the distributor directly. If you have multiple events, please complete 1 form for each event. Completed forms must be submitted 90 days prior to the event date. We cannot guarantee equipment fulfillment for submissions outside of this timeframe. Upon submission, you will receive 2 confirmations, as follows:

<table>
<thead>
<tr>
<th>Conf #</th>
<th>Expected Timeframe</th>
<th>Information Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Confirmation within one week after submission</td>
<td>acknowledge receipt of request form</td>
</tr>
<tr>
<td>2</td>
<td>5 to 10 (U.S.A.) &amp; 10 to 20 (international) days prior to event</td>
<td>provide actual shipping information, as well as return labels and customs paperwork (if needed)</td>
</tr>
</tbody>
</table>

Contact the following in case of equipment emergency: If you are a Clinical Director, please contact Global Clinical Advisor: Dr. Beth Lannon for North America at bethlannon@yahoo.com or Melina Willems for outside of North America at melina.willems@arteveldehs.be. If you are a Special Olympics Program staff person, please contact Meggin van der Hilst at (001) 202.824.0202 or mvanderhilst@specialolympics.org.

FOR YOUR INFORMATION

Please allow time to charge and do behavioral check of equipment before use. All units are to be returned the next business day following your event. e3 HCI Audiometrics (the distributor) donates to SOI shipping costs for units being shipped between venues. SOI pays for units being shipped back to the distributor only (please note that SO Program should include these costs in their grant). If you are instructed to ship units between venues, air bills are included with the equipment. Please DO NOT discard enclosed air bills and DO hold on to the original shipment packaging. If you are returning equipment to the distributor, shipping information (i.e., carrier/account #) will be included with your final confirmation.

Carnets (documentation used to readily move equipment with minimal customs issues) are used for Bio-logic non-U.S. shipments. There are 6 OAE units to each carnet; these units must stay together and the carnet document must remain with the shipment. Please do not discard or remove documents from the packaging.

Insurance Information: While in use at events and during transport, e3 HCI Audiometrics and SOI jointly carry insurance to cover hearing equipment for property damage or loss and damages due to business activities. It is not necessary to acquire additional coverage per event. As an FYI, per unit equipment value is listed below.

<table>
<thead>
<tr>
<th>Value of Equipment—USD:</th>
<th>OAE Bio-logic AuDx</th>
<th>Tympanometer Amplivox Otwave</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$3,895</td>
<td>$2,300</td>
</tr>
<tr>
<td>Audiometer GSI 17</td>
<td>$1,385</td>
<td>Tympanometer GSI 37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$2,400</td>
</tr>
<tr>
<td>Audiometer Maico MA40</td>
<td>$2,293</td>
<td>Audiometer Path Med Sentiero</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$2,290</td>
</tr>
</tbody>
</table>
Receiving your Equipment

- Please immediately check all equipment to ensure you have received correct type and quantities.
- When unpacking box, carefully remove all equipment and save all original packaging for returning equipment.
- Test all equipment to ensure it is working properly.
- Charge any equipment as needed.
- If equipment is not working properly or there are any urgent issues, please contact Senior Manager or Healthy Hearing, Meggin van der Hilst, immediately at mvanderhilst@specialolympics.org or (001) 202-824-0202.
- **Note:** Many issues with the OAE unit can be resolved by tightening or adjusting the probe tip nozzle. An additional nozzle is enclosed as a backup for any issues you may experience.

Sending your Equipment

- Schedule UPS pick-up or drop off at a UPS location the **NEXT BUSINESS DAY** after your event. If this is an issue, please alert Meggin van der Hilst immediately at mvanderhilst@specialolympics.org.
- Utilize original packaging to **carefully pack all equipment**.
- Make sure all test probes for OAE unit and tympanometer are cleaned and disinfected before return.
- Unplug all cords from units including headphones. Ensure that all cords are packed appropriately in carrying cases.
- Separate different size OAE foam ear tips and place in original bags. **PLEASE SEND EXTRA TIPS BACK TO SPECIAL OLYMPICS.**
- Remove any labels and other previous shipment markings on the box that are no longer applicable.
- Use adequate cushioning material that was originally sent with equipment to wrap each item in bubble wrap.
- **Make sure that all equipment is well protected.**
- Use strong tape designed for shipping.
- Please report any equipment issues to mvanderhilst@specialolympics.org and place a note with a description of the problem on the equipment.
- Ensure address label is clearly printed out and displayed on packages.
- Place international shipping paperwork (if needed) in box.
<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity for 80 athletes</th>
<th>1 screening day</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Printing Needs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HH HAS screening forms</td>
<td>100</td>
<td></td>
<td>minimum amount as back up</td>
</tr>
<tr>
<td>HAS data entry manual</td>
<td>2</td>
<td></td>
<td>if data entry at the event is done</td>
</tr>
<tr>
<td>HH recommendations PASS</td>
<td>60</td>
<td></td>
<td>minimum amount as back up</td>
</tr>
<tr>
<td>HH recommendations NO PASS</td>
<td>40</td>
<td></td>
<td>minimum amount as back up</td>
</tr>
<tr>
<td>HH guidelines for referral</td>
<td>2</td>
<td></td>
<td>check out</td>
</tr>
<tr>
<td>HH guidelines for advice</td>
<td>2</td>
<td></td>
<td>check out</td>
</tr>
<tr>
<td>HH guidelines for urgent referral</td>
<td>4</td>
<td></td>
<td>1 otoscopy + 1 ENT + 2 check out</td>
</tr>
<tr>
<td>HH global fact sheet</td>
<td>10</td>
<td></td>
<td>to hand out</td>
</tr>
<tr>
<td>Short manual per station</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short manual OAE - AuDX</td>
<td>3</td>
<td></td>
<td>station 2</td>
</tr>
<tr>
<td>Short manual Tymp - Otowave</td>
<td>2</td>
<td></td>
<td>station 3; only if using Otowave tympanometers</td>
</tr>
<tr>
<td>Short manual for Audiometer- Path Med &amp; Maico</td>
<td>4</td>
<td></td>
<td>station 4+5; only if using Path Med &amp; Maico audiometers</td>
</tr>
<tr>
<td><strong>General Supplies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pens blue</td>
<td>25</td>
<td></td>
<td></td>
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<tr>
<td>Pens red</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thick black marker</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stapler</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staples</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scissors</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cutter knife</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packing tape</td>
<td>1</td>
<td></td>
<td>for boxes post-event</td>
</tr>
<tr>
<td>Duct tape</td>
<td>1</td>
<td></td>
<td>for electrical cables</td>
</tr>
<tr>
<td>Masking tape</td>
<td>1</td>
<td></td>
<td>to tape medium size waste baskets at tables</td>
</tr>
<tr>
<td>Scotch tape</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double-sided adhesive pads</td>
<td>50</td>
<td></td>
<td>to attach guidelines and manuals to walls at stations</td>
</tr>
<tr>
<td>Paper clips (size large)</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-it notes</td>
<td>1 block</td>
<td></td>
<td></td>
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<tr>
<td><strong>Paper (A4)</strong></td>
<td>1 block</td>
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<td></td>
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<tr>
<td><strong>Folders</strong></td>
<td>4</td>
<td></td>
<td></td>
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<tr>
<td><strong>Tissues (in a box)</strong></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Paper towel</strong></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Table Clothes: high quality</strong></td>
<td>TBD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>per table / make sure size of table cloths fit the size of the tables used</td>
<td></td>
<td></td>
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<tr>
<td><strong>Trash bags: medium size (20 liter)</strong></td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>different stations (trash = gloves + specula + ear tips + ear wax waste + …)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trash bags: large size (60 to 100 liter)</strong></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>main garbage bags</td>
<td></td>
<td></td>
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<tr>
<td><strong>Screwdriver: regular/slot</strong></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Disinfectant Hand Gel (bottle with pump)</strong></td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>different stations</td>
<td></td>
<td></td>
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<tr>
<td><strong>Disinfectant Wipes (min. 5 x 5cm, 100/box)</strong></td>
<td>4 boxes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>for audiometers</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Clip boards</strong></td>
<td>10</td>
<td></td>
<td></td>
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<tr>
<td><strong>Gloves, non-latex, powder free</strong></td>
<td>100 S + 700 M + 100 L =900</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>different sizes (small, medium, large)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Paper trays</strong></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>for check out</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Printers</strong></td>
<td>TBD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>for check out recommendation forms if no paper forms</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>White printer paper</strong></td>
<td>TBD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>for check out recommendation forms if no paper forms</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Extra printer ink cartridge</strong></td>
<td>TBD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>for check out recommendation forms if no paper forms</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Screening Materials**

<p>| <strong>Otoscopes</strong> | 3 |
| <strong>Otoscope specula: 2 different sizes</strong> | 100 x 2.5mm + 50 x 4mm = 150 |
| | different sizes (diameter in mm) |
| <strong>Spare lamps/lightbulbs for otoscopes</strong> | 1 |
| | Type depends on type of otoscopes |
| <strong>Batteries for otoscopes: size AA, 2 / 1.5 days</strong> | 4 |
| | Type and amount depends on type of otoscopes + days of screening |
| <strong>Plastic trays for used otoscope specula</strong> | 2 |
| | 2 different colours |
| <strong>OAE units: AuDX I (BioLogic/Natus)</strong> | 3 |
| | needs to be this type and brand of OAE unit ! |
| <strong>Computer cables for AuDX-units</strong> | 3 |
| | computer cables, NOT laptop cables |</p>
<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAE Foam ear tips for AudX (BioLogic/Natus)</td>
<td>50 S + 100 M + 50 L =200</td>
<td>different sizes: small + medium + large</td>
</tr>
<tr>
<td>Spare probe body nozzles for AudX (BioLogic/Natus)</td>
<td>1</td>
<td>spare</td>
</tr>
<tr>
<td>Tympanometers</td>
<td>2</td>
<td>diagnostic tymp OR screening tymp with values</td>
</tr>
<tr>
<td>Reusable tymp tips</td>
<td>1 set</td>
<td>different sizes</td>
</tr>
<tr>
<td>Plastic trays for tymp ear tips</td>
<td>2</td>
<td>2 different colours</td>
</tr>
<tr>
<td>White labels for plastic trays</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Spare probe tips for tympanometer</td>
<td>1</td>
<td>if Otowave is used</td>
</tr>
<tr>
<td>Spare probe tip filters for tympanometer</td>
<td>1</td>
<td>if Otowave is used</td>
</tr>
<tr>
<td>Spare batteries for tympanometers: type AA, 4 per 1.5 days of screening</td>
<td>4</td>
<td>if Otowave is used</td>
</tr>
<tr>
<td>Screwdriver: cross/Phillip's head</td>
<td>1</td>
<td>if Otowave is used</td>
</tr>
<tr>
<td>Blunt end tweezers</td>
<td>2</td>
<td>for station 2 + 3</td>
</tr>
<tr>
<td>Flexible needle</td>
<td>10</td>
<td>for cleaning probe of tympanometer + OAE-units</td>
</tr>
<tr>
<td>Ultrasonic cleaning unit</td>
<td>1</td>
<td>for cleaning tymp tips</td>
</tr>
<tr>
<td>Hospital grade disinfectant</td>
<td>1 liter</td>
<td>amount depends on type of solution, and size of ultrasonic cleansing unit</td>
</tr>
<tr>
<td>Metal or plastic strainer</td>
<td>1</td>
<td>for rinsing cleaned ear tips</td>
</tr>
<tr>
<td>Kidney shaped carton trays</td>
<td>4</td>
<td>to dry tips</td>
</tr>
<tr>
<td>Sound proof test booth</td>
<td>4</td>
<td>or silent rooms for audiometry</td>
</tr>
<tr>
<td>Audiometers for AC and BC testing + masking</td>
<td>4</td>
<td>with light-weighted noise attenuating head phones</td>
</tr>
<tr>
<td>Conditioning materials</td>
<td>4 sets</td>
<td>for play audiometry: e.g. 1 basket and 15 soft balls at each audiometry station</td>
</tr>
<tr>
<td><strong>Electrical Supplies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical power cords</td>
<td>4 x 3 meters/10 feet &amp; 4 x 5 meters/16 feet</td>
<td>different sizes, with safety (orange)for outdoor use --&gt; amount depends on room lay out</td>
</tr>
<tr>
<td>Power strips with 4 to 6 grounded receptacles, preferable with on-off switch</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>---</td>
<td>----------------------------------------------------------------</td>
</tr>
<tr>
<td>HH – banners</td>
<td>3</td>
<td>New HH program gets new banners</td>
</tr>
<tr>
<td>Banner or quick screen / sponsor</td>
<td>TBD</td>
<td>visibility of sponsors TBD with SOI</td>
</tr>
<tr>
<td>Tables</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Chairs</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Panels - 1 corner for storage</td>
<td>...</td>
<td>depends on room lay out</td>
</tr>
<tr>
<td>Decoration screening area</td>
<td>TBD</td>
<td>pink = HH colour</td>
</tr>
<tr>
<td>HH – presents/giveaways for athletes: e.g. pens, bags, etc.</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Plastic bags for athletes</td>
<td>80</td>
<td>not necessary, but handy with all the documents/presents they get</td>
</tr>
</tbody>
</table>

**ENT Ear Wax Removal (Optional, but HIGHLY RECOMMENDED)**

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illuminated light on head band with (lithium) battery</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Oto-microscope</td>
<td>1</td>
<td>optional, if ENTs require this</td>
</tr>
<tr>
<td>Video otoscope + flat screen</td>
<td>1</td>
<td>optional</td>
</tr>
<tr>
<td>Metal ear specula: 3 different sizes (S, M, L)</td>
<td>50</td>
<td>3 different sizes (S, M, L)</td>
</tr>
<tr>
<td>Ear loops: 2 sizes (1, 2)</td>
<td>20</td>
<td>2 different sizes</td>
</tr>
<tr>
<td>Ear hooks: 2 sizes (1,2)</td>
<td>20</td>
<td>2 different sizes</td>
</tr>
<tr>
<td>Micro forceps alligator type</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Kidney shaped plastic trays</td>
<td>8</td>
<td>for clean instruments</td>
</tr>
<tr>
<td>Compresses 10x 10cm</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Chair on wheels</td>
<td>1</td>
<td>for ENT</td>
</tr>
<tr>
<td>Cleansing tray (min. 20cm length, 10 cm height)</td>
<td>1</td>
<td>to clean ENT instruments</td>
</tr>
<tr>
<td>Cleansing fluid (enzymatic soap): 2 times per day</td>
<td>2.5 units/day</td>
<td>amount depends on type of enzymatic soap, and concentration needed + amount of screening days</td>
</tr>
<tr>
<td>Disinfectant tray (min. 20cm length, 10 cm height)</td>
<td>1</td>
<td>to disinfect ENT instruments</td>
</tr>
</tbody>
</table>
| Medical alcohol minimum 70%: 2 times per day | 2.5 units/day | amount depends on size of disinfectant tray --
| instruments need to be fully immersed in "alcohol" + amount of screening days |

**Swim Plugs (OPTIONAL)**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swim plug instant material (red and blue)</td>
<td>1 set each colour</td>
<td>instant material, 2 different colours</td>
</tr>
<tr>
<td>Screws for instant made swim plugs (e.g. Detox handy)</td>
<td>6</td>
<td>2 colours</td>
</tr>
<tr>
<td>Cotton balls with thread</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Pen lights</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Batteries type AAA for pen lights</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Small spoons for instant material</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Syringe</td>
<td>1</td>
<td>for making ear impressions: 2 sizes</td>
</tr>
<tr>
<td>Plastic bags/boxes for swim plugs</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Labels to put on the bags/boxes</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Brochure about swim plug usage and maintenance</td>
<td>TBD</td>
<td>for athletes</td>
</tr>
</tbody>
</table>

**Hearing Aid Maintenance and Repair (OPTIONAL)**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing aid stethoscope</td>
<td>1</td>
<td>for different types of hearing aids</td>
</tr>
<tr>
<td>Plastic ear mold tubing</td>
<td>20cm</td>
<td></td>
</tr>
<tr>
<td>Pre-bent plastic earmold tubing</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>Pincers/Tweezers</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Batteries for hearing aids</td>
<td>1 box each size</td>
<td>different sizes (size 10, 13, 312, 675)</td>
</tr>
<tr>
<td>Box for used batteries</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cleansing bulb</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Soft tooth brush</td>
<td>1</td>
<td>for cleaning hearing aid</td>
</tr>
<tr>
<td>Battery tester</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Screw drivers</td>
<td>1 set</td>
<td>different sizes</td>
</tr>
<tr>
<td>Tubing reamers</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Lighter</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cleansing alcohol</td>
<td>1 small bottle</td>
<td></td>
</tr>
<tr>
<td>Cotton balls</td>
<td>1 small pack</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Quantity</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Instant adhesive (&quot;fast glue&quot;)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Disinfectant Wipes (min. 5 x 5cm, 100/box)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Tone hooks, microphone covers, wax filters, ...</td>
<td>TBD</td>
<td>from different hearing aid brands (e.g. Phonak/Naida, ...)</td>
</tr>
<tr>
<td>Cleaning tool kit</td>
<td>6</td>
<td>could use as giveaway for athletes with hearing aids</td>
</tr>
<tr>
<td>Brochure about maintenance hearing aids</td>
<td>TBD</td>
<td>for athletes</td>
</tr>
</tbody>
</table>
Special Olympics Healthy Hearing TO DO - list

Volunteers:
- Search volunteers:
  - Creation of letter/mail for:
    - Student volunteers
    - Professional volunteers (audiologists + medical doctors)
    - Non-professional volunteers (check-in, guidance, data entry)
  - Mailing volunteers:
    - Postal addresses/email addresses
    - Educational Programs
    - Professional Societies (audiology + medical doctors)
    - Service Clubs (e.g. Lions, Rotary, ...)
- Register volunteers:
  - Digital registration
  - Extra insurance for medical doctors if ear wax removal
- Inform volunteers:
  - General info
  - HH-manual + screening form
- Train volunteers:
  - Practical training at the venue, pre-screening
- Thank you note (+ results) for volunteers

General:
- Equipment and supply list: adapt numbers
- SOI HAP Grant (SO Program)
  - Necessary info for HH
  - Submit to Regional HA Manager (SO Program)
- Contact potential sponsors:
  - Audiological equipment
  - ENT equipment
  - Supplies
  - Giveaways
- SOI Equipment request form (min. 3 months prior to event):
  - Fill in and submit (if needed)
- Reminder sponsors:
  - Practical: receiving and returning of materials and supplies
  - Necessary information for insurance
- Purchase additional supplies
- Copies
- Thank you note (+ results) for sponsors
**Forms:** copy
- HAP-flyer (SO Program to create)
- HAP passport (SO Program to create)
- HH one pager
- HH HAS screening forms
- HH PASS recommendation forms
- HH NO PASS recommendation forms
- Guidelines for referral follow-up
- Guidelines for urgent referral
- Guidelines for general advice
- Mr and Mrs Ears
- Manuals for volunteers:
  - Station 1 → 5
  - OAE with AudX (BioLogic/Natus)
  - Tympanometry with Otowave (Amplivox)
  - Pure Tone Audiometry with Senti Desktop (Path Medical)
  - Pure Tone Audiometry with ST10 (Maico)
  - HAS data input
- Tympanometry normative data
- Post event Equipment and supply list
- Labels for boxes

**Varia:**
- Visit screening location (min. 3 months prior to event)
- Insurance:
  - Volunteers
  - Medical Doctors (if ear wax removal)
  - Equipment

**Post-event:**
- Returning equipment:
  - SOI
  - Sponsors
- Data-input
- Post-event reports
- Thank you note volunteers
- Thank you note sponsors
- Reminder letters athletes
Healthy Hearing Proposed Layout –
(Layout may change based on the actual space – 20 m x 14 m)

MAIN HALLWAY

Exit

Check-Out Stations (4) - Counseling & HAS Form Collection
Need access to 2 outlets and 2 power strips

Station 3: Tympanometry (2)
Need access to 2 outlets and 2 power strips

Station 4 & 5: Pure tone audiometry screening and threshold testing station (4)
Need access to 1 outlet and 1 power strip per sound booth

Check-In Stations (2)
Need access to 1 outlets and 1 power strips

Entrance

Station 1
Otoscopy Stations (3)
Need access to 1 outlets and 1 power strip

ENT (1)
Need access to 1 outlets and 1 power strip

Total Need: 6 Trestle Tables; 3 classroom tables; 52 chairs
8 outlets/power strips

KEY:

One grid box = 1/3m x 1/3m (33cm x 33cm)

= Classroom Table (183 cm x 55 cm)

= Trestle Table (180 cm x 76cm)

= Chair

= Partition

= Opening to small room
Health Hearing Proposed Layout –
Smaller silent room 2
For screening 80 athletes in 1 day

Station 2 – OAE screening
Need access to 1 outlets and 1 power strip

Total Need: 3 classroom tables; 9 chairs
3 outlets/power strips;

KEY:
One grid box = 1/3m x 1/3m (33cm x 33cm)

= Classroom Table (183 cm x 55 cm)

= Chair
Questions for athlete to answer:

<table>
<thead>
<tr>
<th>Hearing?</th>
<th>Good</th>
<th>Not good</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing aids?</td>
<td>Yes (left / right)</td>
<td>No</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

Station 1: Ear Canal Screen / Otoscopy

<table>
<thead>
<tr>
<th>Screener’s Name</th>
<th>(print)</th>
</tr>
</thead>
</table>

Right

<table>
<thead>
<tr>
<th>Ear wax removed:</th>
<th>Yes</th>
<th>Yes, partially</th>
<th>No</th>
<th>Not possible</th>
<th>Athlete refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear</td>
<td>Partially Blocked</td>
<td>Blocked</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Follow-up needed:

<table>
<thead>
<tr>
<th>Ear wax removed:</th>
<th>Yes</th>
<th>Yes, partially</th>
<th>No</th>
<th>Not possible</th>
<th>Athlete refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear</td>
<td>Partially Blocked</td>
<td>Blocked</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Left

<table>
<thead>
<tr>
<th>Ear wax removed:</th>
<th>Yes</th>
<th>Yes, partially</th>
<th>No</th>
<th>Not possible</th>
<th>Athlete refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear</td>
<td>Partially Blocked</td>
<td>Blocked</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Follow-up needed:

<table>
<thead>
<tr>
<th>Ear wax removed:</th>
<th>Yes</th>
<th>Yes, partially</th>
<th>No</th>
<th>Not possible</th>
<th>Athlete refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear</td>
<td>Partially Blocked</td>
<td>Blocked</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Station 2: Otoacoustic Emissions Screen

<table>
<thead>
<tr>
<th>Screener’s Name</th>
<th>(print)</th>
</tr>
</thead>
</table>

Right

<table>
<thead>
<tr>
<th>Pass</th>
<th>No Pass</th>
</tr>
</thead>
</table>

Follow-up needed:

<table>
<thead>
<tr>
<th>Pass</th>
<th>No Pass</th>
</tr>
</thead>
</table>

Left

<table>
<thead>
<tr>
<th>Pass</th>
<th>No Pass</th>
</tr>
</thead>
</table>

Follow-up needed:

<table>
<thead>
<tr>
<th>Pass</th>
<th>No Pass</th>
</tr>
</thead>
</table>

Station 3: Tympanometry Screen

<table>
<thead>
<tr>
<th>Screener’s Name</th>
<th>(print)</th>
</tr>
</thead>
</table>

Right

<table>
<thead>
<tr>
<th>Pass</th>
<th>No Pass</th>
<th>No refer, because:</th>
</tr>
</thead>
</table>

Left

<table>
<thead>
<tr>
<th>Pass</th>
<th>No Pass</th>
<th>No refer, because:</th>
</tr>
</thead>
</table>
Station 4: Pure Tone Screen at 25dB Hearing Level

<table>
<thead>
<tr>
<th>Screener’s Name</th>
<th>(print)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right 2000Hz</td>
<td>O Pass</td>
</tr>
<tr>
<td></td>
<td>O Pass</td>
</tr>
<tr>
<td></td>
<td>O No Pass O No Pass</td>
</tr>
<tr>
<td></td>
<td>O No Pass O No Pass</td>
</tr>
<tr>
<td>Left 2000Hz</td>
<td>O Pass</td>
</tr>
<tr>
<td></td>
<td>O Pass</td>
</tr>
<tr>
<td></td>
<td>O No Pass O No Pass</td>
</tr>
<tr>
<td></td>
<td>O No Pass O No Pass</td>
</tr>
</tbody>
</table>

Station 5: Pure Tone Threshold Test

<table>
<thead>
<tr>
<th>Tester’s Name</th>
<th>(print)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>HZ</th>
<th>1000</th>
<th>2000</th>
<th>3000</th>
<th>4000</th>
<th>6000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right AC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>O masked</td>
</tr>
<tr>
<td>Left AC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>O masked</td>
</tr>
<tr>
<td>Unmasked BC</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Right BC</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Left BC</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>O masked</td>
</tr>
</tbody>
</table>

Key: NR = No Response at Maximum Level  C = Could Not Test

Pure tone threshold test:  ☐ Could not train to respond  ☐ Could not train to respond
☐ Excessive noise
☐ Athlete refused testing
☐ Reliable  ☐ Unreliable

Extra Services Provided At The Event

☐ Hearing Aid Repair/Maintenance
☐ Ear Mold for Hearing Aid
☐ Hearing Aid
☐ Hearing Aid Voucher
☐ Swim Plugs
☐ Ear protection (Noise Plugs)
☐ Education Provided
☐ Other: ..............................................................

Recommended Follow-up Care

☐ Cerumen Removal
☐ Medical Evaluation of Ears
☐ Audiological Evaluation of Hearing
☐ Replacement of Ear Molds
☐ Hearing Aid Repair/Maintenance
☐ Hearing Aid Evaluation and Fitting
☐ Swim Plugs
☐ Ear protection (Noise Plugs)

Comments

Print Name of HH Clinical Director

Signature of HH Clinical Director

2014
### Questions for athlete to answer:
- Hearing? O Good O Not good O Not sure
- Pain in ear? O Yes: left / right O No O Not sure
- Hearing aids? O Yes: left / right O No O Not sure
  - IF “Yes”, wears hearing aids now at event? O Yes O No

### Station 1: Ear Canal Screen / Otoscopy

**Screener’s Name:** 

<table>
<thead>
<tr>
<th>Right</th>
<th>O Clear</th>
<th>O Partially Blocked</th>
<th>O Blocked</th>
</tr>
</thead>
</table>

Ear wax removed:  
- □ Yes □ Yes, partially □ No □ Not possible □ Athlete refused

- O Clear □ Partially Blocked □ Blocked

**Extra otoscopic findings:**
- □ Perforation of ear drum □ Otitis externa
- □ Discharge □ Atretic ear
- □ Foreign object in ear canal □ Eczema in ear canal
- □ Other: ...........................................

- □ Medical evaluation of ears needed for extra otoscopic finding (NOT for Ear Wax)

### Left

<table>
<thead>
<tr>
<th>Left</th>
<th>O Clear</th>
<th>O Partially Blocked</th>
<th>O Blocked</th>
</tr>
</thead>
</table>

Ear wax removed:  
- □ Yes □ Yes, partially □ No □ Not possible □ Athlete refused

- O Clear □ Partially Blocked □ Blocked

**Extra otoscopic findings:**
- □ Perforation of ear drum □ Otitis externa
- □ Discharge □ Atretic ear
- □ Foreign object in ear canal □ Eczema in ear canal
- □ Other: ...........................................

- □ Medical evaluation of ears needed for extra otoscopic finding (NOT for Ear Wax)

### Station 2: Otoacoustic Emissions Screen

**Screener’s Name:** 

<table>
<thead>
<tr>
<th>Right</th>
<th>O Pass</th>
<th>O No Pass</th>
<th>If ‘Can’t Test’, select reason:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O Can’t Test</td>
<td></td>
<td>□ Cannot achieve seal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Probe blocked by cerumen</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Excessive noise</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Athlete refused testing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Left</th>
<th>O Pass</th>
<th>O No Pass</th>
<th>If ‘Can’t Test’, select reason:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O Can’t Test</td>
<td></td>
<td>□ Cannot achieve seal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Probe blocked by cerumen</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Excessive noise</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Athlete refused testing</td>
</tr>
</tbody>
</table>
Station 3: Tympanometry Screen
Screener's Name ____________________________ (print)

Right | O Pass | O No Pass | O Can't Test | If 'Can't Test', select reason: | □ Cannot achieve seal
□ Probe blocked by cerumen
□ Athlete refused testing

Left | O Pass | O No Pass | O Can't Test | If 'Can't Test', select reason: | □ Cannot achieve seal
□ Probe blocked by cerumen
□ Athlete refused testing

Station 4: Pure Tone Screen at 25dB Hearing Level
Screener's Name ____________________________ (print)

Right
2000Hz | O Pass | O No Pass | O Can't Test | If 'Can't Test', select reason: | □ Could not train to respond
□ Excessive noise
□ Athlete refused testing

4000Hz | O Pass | O No Pass | O Can't Test

Left
2000Hz | O Pass | O No Pass | O Can't Test | If 'Can't Test', select reason: | □ Could not train to respond
□ Excessive noise
□ Athlete refused testing

4000Hz | O Pass | O No Pass | O Can't Test

Station 5: Pure Tone Threshold Test
Tester's Name ____________________________ (print)

<table>
<thead>
<tr>
<th></th>
<th>1000</th>
<th>2000</th>
<th>3000</th>
<th>4000</th>
<th>6000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>O masked</td>
</tr>
<tr>
<td>Left</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>O masked</td>
</tr>
<tr>
<td>Unmasked BC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right BC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>O masked</td>
</tr>
<tr>
<td>Left BC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>O masked</td>
</tr>
</tbody>
</table>

Key: NR = No Response at Maximum Level
C = Could Not Test
Pure tone threshold test: □ Could not train to respond
□ Excessive noise
□ Athlete refused testing
□ Reliable □ Unreliable

Extra Services Provided At The Event
□ Hearing Aid Repair/Maintenance
□ Ear Mold for Hearing Aid
□ Hearing Aid
□ Hearing Aid Voucher
□ Swim Plugs
□ Ear protection (Noise Plugs)
□ Education Provided
□ Other: ..........................................................

Recommended Follow-up Care
□ Urgent Follow-up Needed
□ Cerumen Removal
□ Medical Evaluation of Ears
□ Audiological Evaluation of Hearing
□ Replacement of Ear Molds
□ Hearing Aid Repair/Maintenance
□ Hearing Aid Evaluation and Fitting
□ Swim Plugs
□ Ear protection (Noise Plugs)

Comments

Print Name of HH Clinical Director ____________________________
Signature of HH Clinical Director ____________________________

2015 Healthy Hearing
Check-in

Procedure:

✓ Request athlete’s data
✓ Questions regarding hearing: ask the athlete (not the coach) / no suggestive questions:
  o Do you hear well or not?
  o Do you wear hearing aids? Which ear(s)?
    → If yes; Do you have your hearing aid(s) with you?

After check-in:

✓ Guide the athlete with their screening form to the waiting area or a volunteer takes the athlete with them

Extra: Maintenance of hearing aids

✓ If the athlete has their hearing aid(s) with them
✓ Take note of name and identification number, and give this information, together with the hearing aid(s), to a volunteer who will maintain the hearing aid(s)
✓ One volunteer takes the hearing aid(s) for maintenance, while another volunteer screens the athlete
**Station 1: Ear canal screen / Otoscopy**

**Procedure:**
- Wear gloves
- Perform otoscopy in each ear
- Use same speculum for both ears, unless visible infection or blood in first ear
- Plastic ear specula = garbage bag; Metal ear specula = box to clean and disinfect/sterilize

**Note of results:**

<table>
<thead>
<tr>
<th>Clear</th>
<th>ear drum &gt; 50% visible (= PASS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partially Blocked</td>
<td>ear drum &lt; 50% visible (= REFER)</td>
</tr>
<tr>
<td>Blocked</td>
<td>ear drum not visible at all (= REFER)</td>
</tr>
</tbody>
</table>

- Take note on any abnormality of the pinna, in the ear canal or at the ear drum. Let the decision on the necessity of referral for these abnormalities be made by the Medical Doctor.

**Remarks:**
- "Follow-up needed:" check only if Medical Doctor decides it's necessary. Do **not** check this box for referral of excessive ear wax.
- Contra-indications for further screening: make a clear note on the screening form.
  - Excessive ear wax ≠ contra-indication

**Next step:**
- After otoscopy, all athletes continue to station 2 (OAE), regardless of results, unless contra-indication.

**Extra: Removal of Ear Wax**

**Note of results:**

<table>
<thead>
<tr>
<th>Yes</th>
<th>complete removal of ear wax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, partially</td>
<td>partially removal of ear wax</td>
</tr>
<tr>
<td>No</td>
<td>no removal of ear wax, because no Medical Doctor present</td>
</tr>
<tr>
<td>Not possible</td>
<td>geprobeerd om te verwijderen maar niet mogelijk binnen deze setting</td>
</tr>
<tr>
<td>Athlete refused</td>
<td>refusal of ear wax removal by athlete</td>
</tr>
</tbody>
</table>

- **Always** fill in 1 of the options above (= second line at station 1) when the ear canal is "partially blocked" or "blocked", **never** when the ear canal is "clear".
- **Always** check what the situation is after (partially) removal of ear wax (or not) by filling in the third line at station 1. **Never** fill in this third line when the first situation was already 'clear'.
Station 2: Screening with Otoacoustic Emissions

Procedure:
- Wear gloves
- Perform OAE screening in each ear
- Use the same foam ear tip for both ears, unless visible infection or blood in first ear
- Foam ear tip = garbage bag

Note of results:

<table>
<thead>
<tr>
<th>PASS = PASS on screening unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO PASS = REFER on screening unit</td>
</tr>
<tr>
<td>CAN'T TEST = if OAE screening not possible + check one of the reasons in last column</td>
</tr>
<tr>
<td>= NO REFERRAL</td>
</tr>
</tbody>
</table>

Next step:
- If bilateral "pass" ➔ check-out
- If unilateral or bilateral "refer" / "no pass" ➔ station 3 (tympanometry) and 4 (pure tone audiometry), unless contra-indication
**Station 3: Screening with Tympanometry**

**Procedure:**
- Wear gloves
- Perform tympanometry in each ear
- Use the same ear tip for both ears, unless visible infection or blood in first ear
- Used ear tips → box to clean and disinfect

**Note of results:**

<table>
<thead>
<tr>
<th>PASS</th>
<th>NO PASS</th>
<th>CANT TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>= all values within the values of the normative data</td>
<td>= type B-tympanogram or at least one of the numeric results outside of the normative data</td>
<td>= If tympanometry not possible + check one of the reasons at last column = NO REFERRAL</td>
</tr>
</tbody>
</table>

**Normative data for tympanometry: (“rule of 2”)**

<table>
<thead>
<tr>
<th>PASS</th>
<th>NO PASS</th>
</tr>
</thead>
<tbody>
<tr>
<td>= admittance between 0.20 and 2 mmho</td>
<td>= type B (flat)</td>
</tr>
<tr>
<td>middle ear pressure between +20 and -200 daPa</td>
<td>type C (under pressure) with pressure more positive than +20 daPa or more negative than -200 daPa</td>
</tr>
<tr>
<td>ear canal volume between 0.60 and 2 ml</td>
<td>type A as with value for admittance &lt; 0.20 mmho</td>
</tr>
<tr>
<td></td>
<td>type Ad with value for admittance &gt; 2 mmho</td>
</tr>
<tr>
<td></td>
<td>ear canal volume &lt; 0.60 ml or &gt; 2 ml</td>
</tr>
</tbody>
</table>

**Comments:**
- Note type of tympanogram when “no pass”, this way Clinical Director or Lead Audiologist can decide on follow-up recommendations.
- **Type D**-tympanogram, without any further abnormalities on otoscopy = "pass”
- When unilateral or bilateral “no pass” on tympanometry, but all other screening results are normal, then the athlete will not be referred for follow-up, unless the Medical Doctor or the Clinical Director at the event decides otherwise.

**Next step:**
- After tympanometry, all athletes continue to station 4 (Pure Tone Audiometry), regardless of results.
Station 4: Screening with Pure Tone Audiometry

Procedure:
- Test frequencies: 2000 and 4000Hz (ear by ear)
- Intensity level: 25dBHL = “pass”
- Interrupted (pulsed) tones
- Screening procedure: starting level = 50dBHL → 35dBHL (if response at 50dBHL) → 25dBHL.
- Requested response = raise hand; play audiometry if needed
- Short training and/or conditioning if needed
- Disinfect headphones before usage with new athlete

Note of results:

<table>
<thead>
<tr>
<th>PASS</th>
<th>= reliable response at 25dBHL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>→ check-out if 4x “pass” (both frequencies in both ears)</td>
</tr>
<tr>
<td>NO PASS</td>
<td>= no (reliable) response at 25dBHL, or athlete refused testing</td>
</tr>
<tr>
<td></td>
<td>→ station 5</td>
</tr>
</tbody>
</table>

Next step:
- If 4 times PASS → check-out
- If NO PASS for at least 1 of the 4 frequencies → station 5 (threshold testing with pure tone audiometry)

Station 5: Threshold Testing with Pure Tone Audiometry

Procedure:
- Test frequencies air conduction: 1000, 2000, 3000, 4000 and 6000Hz
  - Test frequencies bone conduction: 1000, 2000 and 4000Hz
- Mask if necessary and possible
- Determine hearing threshold, ear by ear, also for ear with “pass” at pure tone screening

Note of results:

<table>
<thead>
<tr>
<th>NR</th>
<th>= No Response: if no response for certain frequency at maximum intensity level.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Note if masking technique is used.</td>
</tr>
<tr>
<td></td>
<td>Note if test results are reliable or not.</td>
</tr>
</tbody>
</table>

Comments:
- Test as many thresholds for air and bone conduction as possible. If attention or reliability decreases, try to test at least 1 threshold for bone conduction (1000Hz).
- Ask assistance if needed.
TYMPANOMETRY
NORMATIVE DATA

Ear canal volume: 0.60 - 2.00 cc
Middle ear pressure: +20 - -200 daPa
Admittance: 0.20 - 2.00 cc
HEALTHY HEARING PROGRAM
SPECIAL OLYMPICS INTERNATIONAL

SCREENING SUMMARY RESULTS

<table>
<thead>
<tr>
<th>Athlete’s Name (print)</th>
<th>Special Olympics Event (print)</th>
<th>Date</th>
</tr>
</thead>
</table>

- **CONGRATULATIONS**! You **PASSED** your hearing screening in both ears.

- **It is still important to:**
  - have your ears checked by a medical doctor for ear wax 1 / 2* times a year
  - have a hearing evaluation by an audiologist / ENT-specialist every 1 / 3 / 5* year(s)

- **Services provided at the Special Olympics event:**
  - [✓] Ear canal inspection
  - [✓] Hearing screening
  - [ ] Middle ear screening
  - [ ] Swim plugs
  - [ ] Ear protection (noise plugs)
  - [ ] Other: .................................................................................................................

ENGLISH
HEALTHY HEARING PROGRAM
SPECIAL OLYMPICS INTERNATIONAL

SCREENING SUMMARY RESULTS

Athlete’s Name (print) Special Olympics Event (print) Date

➢ THANK YOU for attending Healthy Hearing screening.

You are advised to take further action as you DID NOT PASS your hearing screening.

➢ You need to:
  □ see your medical doctor for ear wax removal □ Right □ Left
  □ see your medical doctor for possible middle ear problems □ Right □ Left
  □ see an audiologist / ENT-specialist for hearing evaluation □ Right □ Left

□ Urgent follow-up needed

➢ It is also important to:
  ✓ have your ears checked by a medical doctor for ear wax 1 / 2* times a year
  ✓ have a hearing evaluation by an audiologist / ENT-specialist every 1 / 3 / 5* year(s)

➢ Services provided at the Special Olympics event:
  ✓ Ear canal inspection
  ✓ Hearing screening
  □ Middle ear screening
  □ Hearing threshold testing
  □ Hearing aid repair / maintenance
  □ Ear mold for hearing aid
  □ Hearing aid
  □ Hearing aid voucher
  □ Swim plugs
  □ Ear protection (noise plugs)
  □ Other: ........................................................................................................................................

ENGLISH
HEALTHY HEARING
GUIDELINES FOR FOLLOW-UP
RECOMMENDATIONS

✓ **Otoscopy:** “Partially Blocked” or “Blocked” ear canals in one or both ears
   → referral ear wax removal = “Cerumen Removal”

✓ **Otoscopy:** “Medical evaluation of ears needed for extra otoscopic findings” checked by Healthy Hearing Clinical Director / Medical Doctor in one or both ears (after visualisation of an acute problem in the ear canal or at the ear drum)
   ↓ referral for possible ear problem = “Medical Evaluation of Ears”

✓ **OAE:** “No Pass” in one or both ears
   → no referral → recommendation will depend on results on pure tone audiometry

✓ **Tympanometry:** “No Pass” in one or both ears (no normal type A-tympanogram OR abnormal small or abnormal big ear canal volume OR type B-tympanogram) → referral for possible middle ear problems (unless no other referral is necessary) = “Medical Evaluation of Ears”

✓ **Pure Tone Audiometry:** “No Pass” on pure tone audiometry in one or both ears (response > 25dBL at 2000 and/or 4000Hz)
   → referral to rule out hearing loss = “Audiological Evaluation of Hearing”

**BUT, to avoid over-referral:**

✓ If the only “No Pass” is on tympanometry, no referral is made, unless the Lead Audiologist or Medical Doctor decides that it is necessary.
✓ If there is a “No Pass” on pure tone audiometry for 1 or 2 test frequencies at 30dBL (instead of 25dBL), no referral for possible hearing loss is needed, unless the Lead Audiologist decides it is necessary.
# Healthy Hearing Urgent Referral Guidelines

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>URGENT REFERRAL IF ...</th>
<th>PREVALENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Othematoma - hematoma auris</td>
<td>Visual inspection shows a purplish hard swelling of the external ear. Can result from hit on ear e.g. basketball</td>
<td>Sporadic</td>
</tr>
<tr>
<td>Foreign body in the ear canal</td>
<td>Visual inspection with otoscope shows foreign body e.g. peanut, hearing aid dome, cotton wool.</td>
<td>Sporadic</td>
</tr>
<tr>
<td>Otitis externa</td>
<td>Visual inspection with otoscope shows pink ear canal mucosa, if painful during inspection, or bleeding or moist/fungal spores in dead skin in the ear canal.</td>
<td>More common</td>
</tr>
<tr>
<td>Myringitis</td>
<td>Visual inspection with otoscope shows obvious infection (fever, red or bulbous ear drum) or if painful when flying, driving up and down hills</td>
<td>Sporadic</td>
</tr>
<tr>
<td>Acute otitis media</td>
<td>Visual inspection with otoscope shows obvious infection (fever, red or purple ear drum) or if painful when flying or driving over hills.</td>
<td>More common e.g with a cold/sinus trouble.</td>
</tr>
<tr>
<td>Draining ear</td>
<td>Visual inspection (with otoscope) shows purulent flow in the ear canal of thin or thicker moisture.</td>
<td>Sporadic with perforation.</td>
</tr>
</tbody>
</table>

Melina Willems - Beth Lannon

Healthy Hearing Global Clinical Advisors
HEALTHY HEARING
GUIDELINES FOR GENERAL ADVICE ON
REGULAR EAR AND HEARING SCREENING

General advice on recommendation forms:

It is also important to:
- have your ears checked by a medical doctor for ear wax 1 / 2* times a year
- have a hearing evaluation by an audiologist / ENT-specialist every 1 / 3 / 5* year(s)

* circle the frequency that is appropriate and strike out the other numbers

Guidelines for general advice:

Frequency depends on if an athlete has Down syndrome or not (and age) AND if an athlete has a hearing aid or not:

- An athlete, without Down syndrome, without hearing aid(s):
  ✓ Ear wax: once (1) a year
  ✓ Hearing evaluation: every 5 years

- An athlete with Down syndrome, without hearing aid(s):
  ✓ Ear wax: twice (2) a year
  ✓ Hearing evaluation: every 3 years ≤ 35 years
  every (1) year > 35 years

- Athlete with hearing aid(s):
  ✓ Ear wax: twice (2) a year
  ✓ Hearing evaluation: every (1) year

Healthy Hearing
OAE-units AuDX-I from BioLogic / Natus

- In some cases, the power supply that is delivered with the OAE-unit does not fit in the wall outlet, this because the electrical cable has a typical “male” plug for UK or USA (see white cable in pictures).

IF you have a different plug / wall outlet:
- You will need an electrical cable between the “black” adaptor and the power outlet in the wall. This can be solved by using a computer cable (NOT a notebook cable) with a “female” electrical plug like you see on the picture below. This cable is never with the OAE-unit.
  OR instead of the computer cable an adaptor for the UK or USA “male” plugs to your local type “male” plug.
- The adaptor is a 220V adaptor, which is OK (see black cable with box in picture).
**Tympanometer GSI 37 from Grason Stadler**

- In most cases, the power supply that is delivered with the GSI 37-tympanometer does not fit in the wall outlet, this because the electrical cable has a typical "male" plug for UK or USA (see cable in picture = same problem as with OAE-units).

![Image of GSI 37-tympanometer power supply](image)

This cannot be solved with a simple computer cable, because the part that fits in the charger of the tympanometer is different (see left part of picture above). This can be solved by adding an adaptor to the electrical cable, so the plug fits in your wall outlet.

- If you really don't have an adaptor, which is recommended, you can use batteries instead. The battery department can be found in the handle of the tympanometer. Standard, there will be a rechargeable battery in the tympanometer (see battery below on the left). If not using electricity to recharge this battery, it needs to be replaced by a 9V-battery (see battery below on the right).

![Image of batteries](image)

**BUT, don't forget:**

- If 9V-batteries are used, you cannot put the tympanometer in the charger
- To take the 9V-batteries out of the tympanometer, and put the rechargeable battery back before sending it back to SOI (DLMR Solutions)
Healthy Hearing

Healthy Hearing is changing lives in communities across the globe by providing free hearing screenings and other medical services, including ear wax removal, swim molds, hearing aid maintenance and minor repairs for people with intellectual disabilities. The amount of ear problems and hearing loss among Special Olympics athletes is greater than that found in the general population. Most athletes’ hearing problems are previously undetected, unserved or under-treated. Hearing loss negatively impacts communication ability, quality of life, social interactions and health.

Importance and Impact

Healthy Hearing screenings have found that a large percentage of Special Olympics athletes have untreated ear and hearing conditions.

- 40% have blocked or partially blocked ear canals
- 25% failed Puretone hearing examinations
- 7% have permanent hearing loss
- 109,032 screenings performed in participating countries since July 2018

Purpose of the Screening and Goals:

- Increase access to hearing care for Special Olympics athletes, as well as all individuals with intellectual disabilities.
- Identify permanent hearing loss and provide referral for follow-up care.
- Identify medical issues causing hearing loss and refer to the appropriate medical professional for follow-up.
- Raise audiologists’ awareness of the hearing concerns of people with special needs, including the difficulties involved in diagnosing and accessing treatment options.
- Provide educational and clinical opportunities for students training in the field of Speech Language Pathology and Audiology.
- Provide a list of regional audiologists and ear, nose and throat specialists who care for people with special needs to all athletes who participate in the Special Olympics Healthy Hearing program.
- Develop a body of knowledge about ear canal hygiene of children and adults with special needs.
- Educate athletes about ways to prevent hearing loss from noise exposure.

CONTACT

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