ADAPTIVE
SKATING MANUAL

POWERED BY
TOYOTA
Dear Skating Directors and Instructors,

As skating professionals, you introduce people to the exhilarating sport of ice skating. Working with adaptive skaters provides the opportunity to teach skating to a student who may not have otherwise been able to participate, and with a little preparation and flexibility, you can ensure that everyone has a successful experience.

The Adaptive Skating Manual, created in partnership with Disabled Sports USA and U.S. Figure Skating, should serve as a supplement to existing Learn to Skate USA and U.S. Figure Skating program management resources so that skating professionals can safely teach skaters of all ages and abilities.

This manual is designed to show how simple it is to integrate adaptive skaters into your current skating program. Using slight modifications to your teaching technique and adding equipment, you can provide a safe and effective program and share your love for the sport to a whole new group of skaters.

Your interest in instructing skaters with disabilities is the first step toward inclusion. It is our hope that the tools included in this manual will help you create a safe and fun environment that instills adaptive skaters with a lifelong passion for the sport.

Sincerely,

Kirk Bauer, J.D.
Disabled Sports USA

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**PREFACE:**

This manual will prepare skating professionals to effectively teach skaters of all abilities the fundamentals of ice skating as they learn to enjoy it as a lifelong activity. The progressive Learn to Skate USA curriculum offers support and guidance for instructing skaters with disabilities whether they are taking to the ice for the first time, or returning after illness or injury. With proper instruction and the right adaptive equipment, ice skating is an activity in which nearly anyone can participate, and a solid understanding of the fundamentals is key for later transition to figure skating, hockey, or speed skating.
Adaptive skating programs encourage individuals with disabilities to develop independence, confidence, and physical fitness through participation in ice skating. Research proves daily physical activity raises self-esteem, develops peer relationships, enhances overall health and improves quality of life. Medical professionals, sports professionals and skaters have all suggested that ice skating is a beneficial physical activity for providing healthy exercise and enjoyment for people of all ages and abilities.

PHYSICAL & MENTAL BENEFITS OF ICE SKATING

As a skating professional, you are already aware of the physical and mental benefits skating provides both on and off the ice. By expanding the type of skaters you instruct, you will play a key role in ensuring these benefits are enjoyed by skaters of all abilities. Here are just a few of the benefits specifically valuable to adaptive participants:

• Because it requires an erect posture and a certain measure of control, participation in ice skating has been found to contribute to better breathing, improved circulation and balance, better posture and overall strength
• Skating provides opportunities to have fun with new friends, and to identify with a group who shares a common interest
• Skating is an excellent form of aerobic exercise that requires strength, flexibility, coordination, and balance
• Skating is an enjoyable social activity, whether through group lessons or skating recreationally with friends and family
• Skating builds discipline, self-esteem, confidence, and independence
• Skating promotes a healthy lifestyle
• Skating increases the likelihood for better grades, school attendance and lower dropout rates
• The exhilaration of being on the ice boosts mood
• Skating provides opportunities for families and friends to participate in a sport together

THE POWER OF ADAPTIVE SPORTS

A Harris Interactive research study of more than 1,000 adults with disabilities showed that those participating in Disabled Sports USA adaptive sports programs had higher employment rates, were happier, and enjoyed higher socialization than those not participating in adaptive sports. Learn more about the survey at www.disabledsportsusa.org/harris.
SECTION 2

While this section is intended to provide a brief overview on types of disabilities, it is important to note that, just like skaters without a disability, every skater and disability is unique. Communicate with your skater and their parent or guardian to understand their condition, strengths, and goals prior to instruction, and work together to come up with an appropriate lesson plan.

This section will focus on the characteristics of some common disabilities and highlight certain conditions to describe in more detail. Individuals with the same disability may present very differently. The disability may affect one person significantly but in a limited way for another, and even vary in severity by lesson. If more information about a disability is needed, it is advisable to research the diagnosis to learn more about how to best instruct the skater. Resources for more information about disabilities are listed at the end of the section.

DISABILITY ETIQUETTE
Concerns about interacting with a person who has a disability are often rooted in particular worries.

Will I say or do something to offend them?
Is this sport safe for them?
How do I communicate with this person?

The most important thing to remember is that a person with a disability is an individual first and is entitled to the same dignity, respect, and considerations expected by anyone. /just like skaters without disabilities, skaters with disabilities are individuals with his or her own individual needs and challenges. The information provided here can help guide your interactions, but it is also helpful to remember that the skater or their caregiver/family will be the best source of information for their particular needs. It is encouraged to ask your skater how they believe their disability could impact their training and what they need from you to help them be successful. This will go a long way toward building a rapport and will help make the skating experience a success.

USING PEOPLE FIRST LANGUAGE
One of the first and easiest changes to your program is adjusting the language used in conversation and in print when referring to skaters with disabilities. Using language that puts the skater first and the disability second reinforces that the individual is not defined by their disability. Language choices are important because they can help skaters realize their potential by focusing on their own athletic abilities versus their disability. Positive, people-first language helps provide a more welcoming, inclusive environment, and sets an example for other skaters, instructors, and volunteers to follow.

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<thead>
<tr>
<th>PEOPLE FIRST LANGUAGE</th>
<th>LANGUAGE TO AVOID</th>
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<tbody>
<tr>
<td>Person with a disability</td>
<td>Disabled or handicapped person</td>
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<td>Person who uses a wheelchair</td>
<td>Confined to a wheelchair, wheelchair bound</td>
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<tr>
<td>Person with an intellectual or cognitive disability</td>
<td>Special, slow or simple person</td>
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<tr>
<td>Person with multiple sclerosis</td>
<td>Afflicted by MS or “victim”</td>
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DOS AND DON’TS

DO:

Communication:
• Always use positive, people-first language.
• Ask “how” you can help. Do not take over or make assumptions about the assistance a person with a disability might need. Avoid using a tone or making statements that can be interpreted as condescending.
• Always speak to the skater directly, regardless of who accompanies them and may respond on their behalf (i.e. interpreter or family member).
• If a person has difficulty speaking, allow them to finish their sentence. Give them your undivided attention and remain encouraging. If you do not understand what they are saying, tell them. Do not pretend you understand.
• For skaters with a hearing impairment, face the person when you are speaking. Make sure your mouth is visible, keeping hands, drinks or food away from your face, and speak normally without shouting or exaggerating your speech.
• Try to put yourself at eye level with skaters who use wheelchairs (or are of short stature) if speaking with them for longer periods of time.
• For skaters with visual impairments, introduce yourself when first speaking so they know who is speaking. Speak to them in a normal, conversational tone, just as you would with anyone. Let them know that you need to end a conversation before leaving. Ask the skater if they need assistance getting around. Offer to let them hold your arm when guiding, and make them aware of things in your path of travel (turns, steps, impediments) and provide other cues as needed (i.e. position to be seated). If they rely on a guide, communicate clearly when you are transitioning responsibilities with another guide.

Accessibility
• Keep accessibility in mind at all times. Consider whether pathways are clear, the structure of the entrance to the ice surface, ramps are available and unblocked, bathrooms are accessible, elevators are available, etc.
• Be aware of distances/paths of travel in the skating facility, particularly for individuals with lower limb amputations and other disabilities that affect mobility, as walking longer distances may be more taxing.

Instruction
• Take the time to understand how the skater’s disability may impact their skating. Be flexible and creative about teaching adaptations.
• Always treat your skater just as you would any other. This means expecting them to show up to lessons on time and participate to the best of their ability. Modifications can be made as needed, but overall it is important to put the focus on independence and inclusion.
• Challenge skaters with disabilities at an appropriate level so they experience the joy of success that comes after putting in the hard work. Be flexible with the progression of skills needed to meet expectations.
• Strive to create an environment that promotes independence and self-sufficiency.
• Take the time to complete a new skater assessment prior to their first lesson. While this is important for all skaters, it is especially important for skaters with disabilities, as it will help you plan appropriately for the proper equipment, staffing and facility modifications.
• Be mindful and create a positive environment in which your skater can learn and grow. Schedule ice time for quieter hours, and where possible, avoid curious onlookers to help put first timers at ease. The goal is not to separate skaters with disabilities, just to use your judgment, especially in the beginning.
• Breaking down skills into smaller parts may be beneficial when teaching a new skill - use a variety of cues.

DON’T:
• Don’t make assumptions about what the skater can or can’t do based on their disability. Always encourage the skater to communicate their needs and preferences (communication may be non-verbal so use body language or pictures).
• Don’t assume that a skater with an amputation or other mobility impairment can’t take the stairs unless they tell you otherwise.
• Don’t be worried about using common phrases such as “I’ll see you later” to an individual with a visual impairment or “I’ve got to run” to an individual in a wheelchair. It is normal for these phrases to come up in conversation, and it can be implied that you did not mean to offend.
• Don’t touch a person or an assistive device (wheelchair, walker, etc.) without asking first.
• Never move someone’s assistive device, including service animals, without their permission, and always communicate where the device should be safely placed if not being used.
• Don’t interact with a service animal unless the owner has given permission.
• Don’t assume that a skater with a physical disability also has any other type of disability. Communicate with them as you would with any other skater.
• Don’t be afraid to ask a skater with speech difficulties to repeat themselves if you have trouble understanding. Try to refrain from correcting the skater’s speech or finishing their sentences, instead allow extra time for thought or keep questions to items that require short responses.
PHYSICAL DISABILITIES

The human body is composed of many different systems that work together to function, including circulatory, digestive, and respiratory systems, among others. For the purpose of this manual, we will focus on describing conditions that affect how the muscular, skeletal, and nervous systems function.

It is helpful for skating professionals to be familiar with certain characteristics of physical disabilities. Some characteristics are present across various diagnoses and will be described below:

- Muscle Tone - Muscle tone is different from muscle strength in that it is based in the nervous system and cannot be changed through voluntary control or exercise. Disrupted signals in the brain that cause atypicalities in muscle tone may be present as uncontrolled tightening (hypertonia), muscle weakness (hypotonia), or over reactive reflexes. Depending on the disorder, changes in muscle tone may vary over time and be influenced by movement, clothing, emotional state, injury/illness, or sometimes there is no known cause. Skaters with atypical muscle tone may have challenges maintaining balance and coordinating movements.
  - Hypertonia: Uncontrollable rigidity, muscle spasms, inflexibility; common with brain and spinal cord injuries, cerebral palsy, multiple sclerosis
  - Hypotonia: Weak, low muscle tone; common with Down syndrome, brain and spinal cord injuries, amputations, multiple sclerosis, autism spectrum and developmental disorders
- Balance - Complex interactions of the body’s systems allow us to have the spatial awareness necessary to coordinate movements, including the movements required to maintain balance. Damage to any part of this system may affect our ability to have the balance required for skating. Balance deficits are a characteristic of many disabilities, and given the influence muscle tone has on balance, include all disorders mentioned above (hypertonia/hypotonia).
- Fatigue - Most skaters, including those with disabilities, will become more physically fit and improve their endurance over time. However, neuromuscular diseases like muscular dystrophy, amyotrophic lateral sclerosis (ALS), and other conditions such as brain injury, spinal cord injury, and multiple sclerosis, can impair the body’s ability to build strength and stamina as it typically would. As part of the disease process, this symptom may fluctuate over time and vary depending on other factors such as weather, or it may become progressively worse with no improvement.
  - Delayed Processing - Developmental, intellectual, and cognitive disabilities are characterized by a dysfunction in which the brain analyzes, receives and responds to information. This may be recognized through delays in physical movements, turn taking during conversation, reaction times, etc.

The following section highlights select physical disabilities, including vision and hearing impairments, as well as developmental and cognitive disabilities. For more information on these and other disabilities, please refer to the resources section of this manual.

Amputation: Amputation refers to the surgical removal of a portion or all of a limb due to disease or trauma. The skater’s mobility will be impacted based on their recovery, rehabilitation, and the location of the amputation. Amputation degrees are often referenced to by their proximity to the limb’s joint.

- Leg amputations
  - Below the knee amputation (BKA): Skaters still have some musculature around the knee, and flexion and extension of a prosthetic is possible.
  - Above the knee amputation (AKA): Skaters do not have a knee joint, and it is difficult for a prosthetic to bend at the knee, having a greater impact on balance and strength.
- Arm amputations: May affect balance, speed, inertia, or reduce the skater’s ability to put weight on the arm in the event of a fall. Minor adaptations for advanced figure skating elements that require catching hold of a foot or leg may be needed.
  - Below the elbow amputation (BEA)
  - Above the elbow amputation (AEA)

Traumatic Brain Injury (TBI): Traumatic Brain Injuries occur when an external force causes the brain to move inside of the skull cavity. They are categorized as mild, medium or severe, and can affect skaters in numerous ways, including cognitive deficits, behavioral changes or physical impairment, depending on the portion of the brain that was injured.

Cerebrovascular Accident: Cerebrovascular accidents, more commonly known as strokes, occur when blood flow to a portion of the brain is blocked. These can happen at any age and could have varying effects on a skater’s vision, speech or muscle control, depending on the area of the brain that was affected.

Spinal Cord Injury (SCI): Spinal cord injuries occur as the result of damage to the cells within the spinal cord or damage to the nerve tracts in the cord. Generally speaking, the body is largely affected from the point of injury down. The effects of SCI depends on the level of injury in the spinal cord and the type of injury (complete or incomplete). The spine may or may not be surgically stabilized. SCI may not result in paralysis. SCI that results in quadriparesis (paralysis that affects all four limbs to some degree) is caused by injury to the cervical (upper) spinal cord and often requires the skater to use a wheelchair. SCI that results in paraplegia (paralysis in lower limbs only) is caused by injury further down the spine. If the injury is incomplete, some nerve signal can still be sent to the brain, even below site of injury, resulting in the ability to feel sensation and movement. Individuals with incomplete SCI will still be able to walk.

Cerebral Palsy (CP): Individuals with cerebral palsy are usually born with the condition, but it can also be acquired within the first 2-5 years of life. CP is the result of brain injury or brain malformation that causes atypicalities to areas of the brain that control motor functions. Skaters with CP can vary greatly in ability, as symptoms can range from very mild to severe, often affecting speech, muscles, joints, and more. Skaters with CP might have difficulty with balance, walking, involuntary movement or other tasks that require fine motor skills. Cognitive impairments are present in approximately 50 to 50 percent of individuals with CP.

Spina Bifida (SB): Spina bifida is a birth defect that impairs development of the brain or spinal cord. The result is nerve damage that may cause a range of mild to severe physical and cognitive impairments, including paralyzing that permanently impacts lower limb movement for some individuals. Approximately 80 percent of individuals with SB also have hydrocephalus, an accumulation of cerebrospinal fluid around the brain that can be harmful if left untreated. A tube called a shunt may be inserted into
the brain to prevent too much fluid from building up around the brain.

Multiple Sclerosis (MS): Multiple sclerosis is a progressive autoimmune disease that forms scar tissue (sclerosis) over the protective covering of the nerves (myelin sheath). The disease is most often diagnosed in adulthood and can cause a range of symptoms that can be mild to debilitating, and vary over the course of the illness. Fatigue, muscle weakness, pain, and trouble concentrating are common. At later stages, individuals with MS may lose the ability to walk and carry out activities of daily living.

Dwarfism: Dwarfism occurs when, either through a genetic or medical condition, a person reaches an adult height of 4’10” or less. A genetic condition called achondroplasia is the most frequent cause of short stature at 70 percent of cases, however, there are approximately 200 types of dwarfism. Most people of short stature are generally healthy and able to overcome physical challenges with medical/surgical interventions as needed, and by leading a healthy lifestyle.

Visual Impairment (VI): Visual impairments may be congenital (inherited) or acquired (injury). The leading causes of VI and blindness in the U.S. are age-related eye diseases like macular degeneration, cataracts, and glaucoma. VI may be partial or total (blindness). An individual is diagnosed as having VI when, with best correction, they have difficulty reading a newspaper and are unable to see objects with peripheral vision. “Legally blind” is defined as no better than 20/200 corrected vision in the better eye, or a visual field not extending beyond 20 degrees in the better eye, or a visual efficiency of no more than 20 percent. “Legal” refers to whether or not a person is eligible for government benefits due to their VI. VI rehabilitation is effective, especially in young children, to “rewire” the brain to cope with vision loss. VI is typically not accompanied by any type of cognitive or intellectual deficit.

Hearing Impairment: An individual with a hearing impairment may have little or no hearing. A partial or total inability to hear may occur suddenly or gradually over time for many different reasons, including but not limited to: malformation of the inner ear, hereditary disorder, injury, illness, or aging. Individuals with moderate hearing loss may be able to hear sounds, but have difficulty with certain speech patterns, whereas individuals with profound hearing loss may not be able to hear at all. Hearing loss may also impact the ability to communicate through speech. American Sign Language (ASL) is the primary language of many North Americans who are deaf, and is just one of many options individuals may choose to communicate; medical devices (hearing aids, cochlear implants) and assistive technologies (augmentative communication device, alerting devices) can also be used.

Cognitive Disability: Cognitive disability generally refers to any condition that affects mental processes. For example, cognitive dysfunction is present with TBI and learning disabilities. It is incorrect to assume that an individual who has a cognitive disability also has an intellectual disability.

Learning Disability (LD): Learning disability is a term used to group neurologically-based processing problems that interfere with an individual’s ability to acquire skills at the same rate as their peers. Examples of learning disabilities are dyslexia (affects reading and language skills) and auditory processing disorder (affects interpretation of sounds and listening comprehension). Related disorders that also impact learning include attention deficit hyperactivity disorder (ADHD) and dyspraxia (impaired coordination of movements needed for physical activity and/or speech).

Developmental Disabilities: Developmental disability is an umbrella term that includes intellectual disability and other disabilities that are apparent during childhood. Developmental disabilities can present as intellectual and/or physical disabilities, and the degree to which an individual’s development is affected may be mild, moderate, severe, or profound. Within this category, the evaluation and classification of intellectual disabilities is complex. The three major criteria for intellectual disability are: Significant limitations in intellectual functioning, significant limitations in adaptive behavior, and onset before the age of 18.

Autism Spectrum Disorder: A group of neurodevelopmental disorders including Asperger Syndrome and Pervasive Developmental Disorder. Characteristics range from mild to severe, and impact behavior, social skills, communication.

Down Syndrome: A genetic disorder that causes intellectual and physical impairments including short stature, low muscle tone, and impaired balance.
As a skating professional, you know how to create a curriculum that brings out the best in your skaters. This section focuses on some small adaptations you can make to ensure that the same successes happen for skaters with disabilities. The Special Olympics and Therapeutic Skating badge curricula found within Learn to Skate USA should be used as a guide.

STARTING A LEARN TO SKATE USA ADAPTIVE SKATING PROGRAM

The Adaptive Skating curriculum is offered as part of Learn to Skate USA. As a registered Learn to Skate USA program or U.S. Figure Skating member club, you may utilize the program’s Special Olympics and Therapeutic Skating resources. The benefits of Learn to Skate USA include full use of the curriculum, membership materials, instructor certification, skater rewards and recognition, logos and marketing materials, general liability and sports accident insurance coverage for each participant.

If you are not already associated with a registered Learn to Skate USA program, you will need to register as a new program. To register, email Info@learntoskateusa.com.

Once processed, you will receive email confirmation with your program number and log-in information for the Learn to Skate USA Management System, where you can access your program profile, roster, all curriculum resources, program management resources and much more to organize and run your program.

Registering members:

All participants in your program must be current Learn to Skate USA members. Once registered, skaters will receive a welcome email, a welcome packet with their member number, skater record book, parent handbook, a copy of Learn to Skate USA The Magazine, sports accident insurance and information about ice skating.

Learn to Skate USA offers easy ways to register your participants with a new option of direct registration through the sign-up portal at LearnToSkateUSA.com. If you use direct registration, prior to the skater signing up for your classes, have them go to the website and sign up through the portal. Ask them to bring their confirmation email to the rink or ask for their member number when they enroll in your classes. Through the management system, you will be able to claim the members to your program roster. You can also utilize the online registration system to register your participants through your program profile or send us an Excel spreadsheet of your participants.

Registering your instructional staff:

All instructors teaching within your program must be current instructor members of Learn to Skate USA. The instructor requirements include a current membership, passed background check and completed online certification.

Contact information:

Learn to Skate USA
Website: www.learntoskateusa.com
Email: Info@learntoskateusa.com
Office: 877-LTS-1400 (877-587-1400)

ADA CONSIDERATIONS FOR SERVING SKATERS WITH DISABILITIES

The Americans with Disabilities Act (ADA) greatly expanded the opportunities and protections for people with disabilities, including ensuring access to sports facilities and instruction. In 2014, then President Barack Obama further clarified these protections so that students with disabilities are allowed to participate in interscholastic sports in the same manner as their fellow students. In other words, as a skating professional, if you provide a program to youth skaters as part of a school program, you may be required to provide the same opportunity to youth skaters with disabilities. For many, this will mean creating programs that are inclusive, or have one or two adaptive skaters, versus attempting to create a separate program for skaters with disabilities.

It is important for skating professionals to be familiar with the ADA and how it is applied in their state. Reasonable accommodations must be made for your program.
to be accessible to people with disabilities. Reasonable accommodations do not need to be provided if doing so would cause undue hardship to the program, either by excessive financial burden or significant interference with activities of the skating facility.

**ESSENTIAL ELIGIBILITY CRITERIA**

It is the program’s responsibility to provide safe and quality skating instruction. Programs are encouraged to have clear, written guidelines about whom they are capable of serving.

Essential Eligibility Criteria (EEC) is a term used to describe the minimum requirements an individual must meet in order to participate in an activity. EEC enables objective assessment about who can safely participate, thereby reducing case-by-case determinations and helping to protect you from accusations of discrimination. EEC will vary between skating programs, based on the resources available.

**Defining Essential Eligibility Criteria**

**Resources to Consider**

1. Training and expertise of instructors
2. Availability of adaptive equipment
3. Volunteer recruitment & training
4. Accessibility of ice rink

**Functional Thresholds: Cognitive or physical skills, abilities, or attributes necessary for safe participation.**

1. Height/weight restrictions for adaptive equipment
2. Making quick safety judgements
3. Temperature
4. Properly wear required gear

It is important to be realistic about the services that you are capable of safely providing. Establishing EEC for your program helps ensure the safety of all skaters you serve. EEC should be consistently enforced to avoid accusations of discrimination. This means that EEC should apply, and new skater assessments must be done for every skater in your program – not just those with disabilities.

**NEW SKATER ASSESSMENT**

The skating program should create an assessment process at intake to determine whether a skater meets EEC. It is appropriate to ask questions and learn how to make skating the best possible experience. This includes learning more about their disability and medical history that is relevant to the activity. Through the assessment process, you will gather information about the skater that will inform your decisions about adaptations.

- Be respectful above all else. Be mindful not to ask unnecessary or intrusive questions. Someone who has a disability should be afforded the same amount of respect as anyone else.
- Ask functional questions to learn about the characteristics of the disability that will impact the skating lesson. It is often not necessary to know the individual’s diagnosis.
- Each person with a disability has different needs, so do not make assumptions or generalizations.
- Discuss concerns of parents/caretakers prior to getting on the ice.

Examples of Assessment Questions:

- Do you have any allergies?
- Do you have any chronic pain issues we should be aware of?
- Exposure: Do you have any problems regulating your body temperature? Do you have a history of heat or cold related illness?
- Medical Devices: Do you use any assistive devices for mobility, communication, or hearing? Does the device effect helmet fit? Can the device function normally when exposed to cold, under a helmet, during skating, and after a fall?
- Assessing mobility: Can you stand independently for a given period of time, transferring weight from one foot to the other?
- Assessing seizure history: Have you had a seizure in the past six months? What happens when you have a seizure?
- Assessing fall risk: Do you feel unsteady when standing or walking? Have you fallen in the last year? Do you worry about falling? Has a physician advised you against participating in contact sports or activities that could increase your risk of experiencing a fall?
- Spinal Cord Injury: Do you have a history of autonomic dysreflexia?
- Skin Integrity: Are you prone to pressure sores? Where do we need to consider additional padding for equipment?
- Vision Impairment: Take the time to understand what, if any, sight your skater has and talk through some of the daily adaptations they use, such as brightly colored tape to point out hazards, to help come up with instruction solutions together.
PRECAUTIONS AND CONTRAINDICATIONS

Safety of the skater is paramount. The following list of precautions and contraindications are intended to be a preliminary guide, and does not encompass every precaution a skating professional will take when teaching a skater with a disability. It is important to discuss concerns with the skater directly to learn more about their disability and how it could be impacted by ice skating. It is best to talk through the skater’s concerns directly and come up with solutions together.

Medical Devices
Precaution: Be aware of the skater’s medical devices, both internal (cochlear implants, shunts, etc.) or external (orthotics, augmentative communication device, hearing aids, etc.). Determine the need for these devices to be used during the lesson. Some are essential, while others may be removed temporarily.

Contraindication: Skating should not occur if the medical device significantly interferes with the activity or cannot function normally under the conditions.

Skin Integrity
Precaution: Be aware of the impact skating can have on skin covering the residual limbs, and schedule appropriate break times for cleaning of liners. Use extra liners to pad the prosthetic.

Contraindication: Poor skin integrity on a weight-bearing surface that cannot be adequately padded. Skating would aggravate pressure sores and cause significant harm.

Falls
Precaution: Be aware of the inherent risk of falling on ice as part of the fundamental nature of the sport. Consider using helmets for those who might fall more frequently and for younger students.

Contraindication: Those who have been medically advised to avoid activities that increase their risk of falling.

Latex Allergy
Latex allergies occur in the general population, but are particularly common among individuals with disabilities who have developed sensitivity after significant exposures due to frequent hospitalizations or surgeries (i.e. spina bifida). Reactions can be minor or life threatening. Consider where latex is present at a skating facility (gym mats, carpet backing, clothing, equipment, etc.). If your skater has a latex allergy, learn more about their reaction and plan how to reduce exposure.

Precaution: Provide a physical barrier to prevent skin contact with latex.

Contraindication: Individual with life-threatening reactions to latex and contact cannot be prevented during skating lessons.

Adaptive Skating Instruction
In ice skating, skaters progress at their own rate according to their ability. There are a number of programs available throughout the country for skaters with disabilities. Different types of programs have been developed to meet needs in various communities. Utilize the Therapeutic Skating and Special Olympic badge curriculum found within Learn to Skate USA, powered by Toyota.

Examples of class format options:

- Adaptive skating classes may be incorporated into established Learn to Skate USA sessions.
- Adaptive skating classes are taught with a lead instructor teaching skills and additional volunteers/instructors to assist the participants. Use the Therapeutic Skating or Special Olympics badge curriculum as the foundation.
- Group lessons can be inclusive by involving skaters of all abilities. Being taught alongside skaters without disabilities can help break the stigma associated with disabilities and remove the barriers to conversations and interactions among groups of people who might be separated. This environment can be an enriching experience for all skaters.
- Class may be an open-format with the instructors/volunteers providing the core on-ice instruction.
- Lessons may also be taught individually and customized to the needs of the skater.
As a skating professional, you have the responsibility of maintaining a safe learning environment at all times to ensure the physical and emotional well-being of all skaters. Working with skaters with disabilities may require a few additional safety considerations that can be easily incorporated into existing programs.

### CLASS PROCEDURES
Evaluate your current class procedures and make sure they are appropriate for skaters with disabilities.

#### Before Class
- **Plan your lessons.** This is one of the most important factors to success in instructing skaters of all abilities. Complete the lesson plan prior to coming to the skating facility, writing out the skill progression (with adaptations, if needed) in sequential order. Plan ahead for managing traffic flow and how to have skaters enter/exit the ice in as seamless a way as possible. Avoid drawing the attention of bystanders as skaters with a disability experience points of the lesson that might be the most challenging, i.e. first stepping onto the ice.
- **Prepare the ice with any props or equipment prior to the lesson.**
- **Communicate with the skater and/or their caregiver/parent about access to the restroom during a lesson.** Personal care is not typically the responsibility of skating professionals, staff at the skating facility or volunteers.
- **Before skaters take to the ice, check their skates and adaptive equipment to make sure everything is in good condition and fitted properly. Check helmet fit, mittens/gloves, and fix any clothing concerns.**
- **Communicate with the skater and/or their caregiver/parent about class procedures, and address any questions and concerns before you take to the ice.**

#### During Class
- **Enlist the support of volunteers or parents as needed for managing traffic flow and getting skaters to enter/exit the ice.**
- **Consider adaptive skaters in your emergency action plan.** Have a specific person/people designated to assist them. In the event of an emergency, it is your responsibility as a skating professional to take charge of the situation by assisting the injured skater and keeping other skaters safe. Being certified in First Aid is highly recommended and mandatory at some facilities.

#### After Class
- **Communicate with the skater and/or their caregiver/parent about their progress.** Listen for feedback about any concerns or questions they have and incorporate them into future lesson plans.

### RISK ASSESSMENT
Because safety of the skater is paramount, it is important to know your program and be realistic about the skaters you are able to safely serve. Asking basic questions about the skater’s disability and medical history during an intake process will help provide you with a clear picture of their needs and safety concerns you will have to address.

#### Prevention of Disability-Related Injury and Illness
While many of the injury prevention strategies will remain the same for all skaters, there are certain circumstances when a skater’s disability has important implications to consider in terms of heightened risk of injury and its consequences. No matter what precautions you take as a skating professional, skating carries with it inherent risks, and injuries may occur. As with any skater, make sure to keep records of any injuries, work with the skater and/or their caregiver/parent and a medical team to decide an appropriate time to return to the rink, and pay attention to the individual skater for signs of fatigue, pain or other indicators that the skater is not well.

This section will highlight key areas of concern for instructors to note when teaching skaters with disabilities. See the Skater Assessment section of this manual for more information about precautions. This section is not intended to be a comprehensive list of every injury/illness that can be exacerbated.
by ice skating.

**Fall Risk**

A common concern among all skaters, especially beginners, is falling, particularly those that result in head injuries. While you shouldn’t assume all skaters with disabilities are at a greater risk of falling or likely to sustain major injuries from a fall, it is important to consider factors that may put them at greater risk or potentially aggravate their condition. All skaters should be informed that, despite best efforts for prevention, falling is an inherent risk to skating and may result in injury.

As part of your new skater assessment, you will determine what impact the disability has on the skater’s mobility. Falls are more likely when an individual has a disability that impacts their strength, balance, or coordination, such as TBI and stroke. These individuals may sustain falls more frequently, whether they are on or off the ice. It may be suitable to utilize volunteers and/or equipment to provide physical support to the skater. You may also modify instructional techniques to be appropriate for their needs. It is a strong recommendation that all beginner skaters wear safety helmets. A skater with a disability will benefit from wearing a helmet to reduce injury if they have a condition that impairs their balance and increases likelihood of falls, or if they have a history of seizures or concussions.

The Consumer Products Safety Commission offers guidelines for the type of helmet to wear for different activities. Although a helmet standard does not exist specifically for ice skating, until such standards are written, wearing a well-fitted helmet may be preferable to wearing no helmet at all. For ice skating, suggested helmets include: ASTM F1447; Snell B-90A, B-95, N-94. When buying a helmet, check the fine print for certifications.

**Skin Integrity**

Skin plays several important roles for the human body, and it is critical as a mechanism for sensation and protection. Certain disabilities that may have different problems related to the function of skin include spinal cord injury, amputation, and spina bifida. These individuals are at greater risk for impaired skin integrity, a general term used to describe lack of sensation, fragility, and breakdown of the skin. Impaired skin integrity places an individual at increased risk for pressure sores, which occur when there is sustained force against bony prominences that results in trauma and infection.

Individuals may be prone to pressure sores in areas where they have contact with equipment but lack the sensation that would inform them of impending injury, particularly when engaging in activities that expose the area to moisture and perspiration. Skaters with amputations may develop pressure sores where the limb is placed in the prosthetic socket. Make sure to include breaks where the skater can make adjustments to equipment or add extra padding to help reduce friction. Risk can be reduced by maintaining open communication about any pressure sores that may be present or developing over the course of their lessons.

**Exposure**

Exposure to extreme cold at outdoor rinks, or even mild cold at indoor rinks, may cause harm to individuals with impaired thermoregulation. Neurologic disorders can impair the skater’s response to cold and any disorder that restricts mobility (spinal cord injury, stroke, multiple sclerosis, and others) may limit the ability to generate heat by muscle contraction and diminish one’s capacity to stabilize their core temperature. It is especially important to pay attention to signs of impending problems in skaters who lack the sensory mechanisms to feel that they are cold. Skating instructors play an important role in preventing complications due to exposure. It is important to ensure skaters are dressed appropriately in insulating clothing and take breaks for warming as needed. Longer sessions or events may require additional consideration.

**Autonomic Dysreflexia**

Autonomic dysreflexia is a rare but potentially life-threatening condition that may occur in individuals who have SCI above level T5. Symptoms may include high blood pressure, change in heart rate, changes in skin color (paleness, redness, blue-grey skin color), and excessive sweating. It is a reaction of the autonomic (involuntary) nervous system to overstimulation that is triggered by any strong or painful stimulus that occurs below the level of SCI, most often an unrecognized full bladder or bowel. Less common causes of autonomic dysreflexia include, but are not limited to: Pressure sores, restrictive clothing, temperature fluctuations and bone fractures. Privately ask participants with SCI about autonomic dysreflexia and whether they have a history of the condition.

**PROTECTING PERSONAL INFORMATION**

You are not obligated to obtain comprehensive medical information about any skater you teach and medical clearance from a physician is not standard for an individual to enroll in skating lessons. As such, a skater with a disability is not required to disclose personal medical history, diagnoses, or medications. However, it is important for a skating instructor to obtain certain relevant medical history for all skaters as part of the registration process.

Skaters should be encouraged to share information on a voluntary basis that will aid the instructor in serving them appropriately. This may include information on any condition that may put the skater at significant risk of harm or injury by participating in the activity. Examples include a history of seizures or head injury. Knowing this information is critical to help protect skaters from harm, disclose risks associated with skating, and plan for appropriate modifications in lesson plans in order to provide a safe and successful experience. One of the ways to ensure you are able to obtain comprehensive information is to have a thorough registration process and to educate participants about your confidentiality practices, reassuring them that personal information will not be unnecessarily shared.

It is important for skating professionals to maintain confidentiality for everyone they serve. Teaching skaters with disabilities brings a greater awareness to this responsibility, as instructors may be privy to more personal health information than they are accustomed to. Although we recognize that ice skating provides a multitude of health benefits, and can even be referred to as therapeutic at times, it is important to differentiate between clinical and recreational activities. You are not providing medical services by teaching skaters with disabilities. However, you do have a responsibility to protect the privacy of all skaters who disclose personal and medical information.

It is important to keep assessment and progress notes confidential, and be mindful to inquire about and record only what is necessary. Your professionalism and courtesy will help build rapport with the people you serve. This trust is important to ensure an individual with a disability can communicate with you openly and honestly over the course of their skating lessons. Volunteers who assist the skater should be informed about the characteristics of the disability on a need-to-know basis so they can understand how to best provide support in the lesson. It may not be necessary to inform volunteers of a skater’s diagnosis. Lastly, you have a responsibility to seek written permission from the skater before disclosing information about their disability to any outside source, particularly the media.
Adaptive ice skating equipment makes it possible for skaters with physical disabilities to take part in ice skating programs. There is a vast array of equipment that cannot all be covered. This manual presents the major types of equipment and the accessories you are most likely to need with tips to get your skaters off to a good start. Some skating facilities have devices meant to assist skaters during public ice sessions or classes through Learn to Skate USA such as on-ice walkers, portable ramps, and sleds. Walkers, sleds and other equipment can also be used when needed for skaters with physical disabilities.

ADAPTIVE SKATING EQUIPMENT & ASSISTIVE MOBILITY DEVICES

This list is provided for reference and not intended to be representative of all equipment on the market. Inclusion on this list is not intended to serve as an endorsement or recommendation for a product.

Becker Arena Products, Inc.
Contact 800-234-5522 or https://beckerarena.com/rink-ready-supplies-equipment/coaching-aids-game-equipment/skate-training-aid.html
- Skate Training Aid metal frame trainer helps maintain correct center of gravity for stand-up skaters. Available in adult and child sizes.

Sled Hockey Equipment Suppliers – USA Hockey
www.usahockey.com/sledequipmentsuppliers

Flaghouse, Inc.
Adapted Mobility Walker
Contact 914-699-1900 or www.flaghouse.com

Gilding Stars, Inc.
Contact 716– 608-8345 or www.gildingstars.org
- Ice Skating Adaptive Walkers and Riedell Ice Skates
- Specialized ice skates for pronated feet, surgically corrected club feet, or for use with orthotics.
- Sling seat walker for supporting skaters with reduced ability to bear weight. Height and weight limits apply. Additional training required to purchase.

Nice Rink
- SkateAid is a metal frame trainer that helps maintain correct center of gravity for stand-up skater. Available in adult and child sizes.

Segal Design Institute, Northwestern University
Contact 847-467-3533 or www.segal.northwestern.edu/projects/clients/
This program can design specific requested adaptive equipment and has experience creating adaptive ice skating devices.

Sidelines
Contact 800-265-3782 or https://sidelines.ca/product/00/BST/SKATE-TRAINING-AID
- Skate Training Aid is a tool to aid in balance and support for stand-up skaters. Height of the handle bar while in use can either be at 35” or 38” off the ice.

Amazon
www.amazon.com

More adaptive sporting equipment is available today than ever before. Disabled Sports USA maintains the most comprehensive adaptive equipment resource on the web. Stay up-to-date on the latest developments in adaptive equipment for ice skating and other sports here: http://www.disabledsportsusa.org/sports/adaptive-equipment/
ACQUIRING EQUIPMENT

The cost of equipment will vary and there are many options for funding sources to aid in acquiring gear to serve skaters with disabilities, from local foundations to large grants. Individual skaters may also choose to pursue grant funding to meet their particular needs.

U.S. Figure Skating Community Development Grants: www.usfigureskating.org. (Click on Athletes, then Funding.)
Challenged Athletes Foundation: http://www.challengedathletes.org. (Offers support for individuals to purchase sports equipment through their annual grant process.)
Disabled Sports USA: http://www.disabledsportsusa.org. (Chapters of Disabled Sports USA are eligible for grant opportunities to acquire equipment.)
Kelly Brush Foundation: http://kellybrushfoundation.org. (Grant opportunity for individuals who have paralysis caused by SCI – traumatic injury or medical cause, spina bifida, or transverse myelitis for purchase of adaptive sports equipment or program fees.)

MAKING MODIFICATIONS

Prior to the availability of manufactured adaptive equipment, athletes and professionals were responsible for creating homemade adaptations through trial and error. And, despite the growing marketplace for adaptive equipment, there still may be times that you will need to create something unique to meet your skaters’ needs. It is important to remember that the equipment should be adapted to the skater and not vice versa. Safety should be a priority for any modification, followed by fit, function, comfort, and appearance.
Manufacturers’ warranties may be voided if modifications are made to the equipment, or if the equipment is used in a manner that was not its intended purpose.

EQUIPMENT MAINTENANCE

It is important to consider how use of equipment may shorten, or extend, its lifespan, for example, the environmental conditions it is subject to, frequency of use, and method of use. Perspiration and extreme temperatures can contribute to faster degradation of certain materials overtime. It is reasonable to assume a piece of equipment that is in heavy rotation at a year-round program will show signs of wear-and-tear sooner and need to be replaced more often. One fall can compromise the ability of a helmet to protect an athlete from injury.

Skating instructors, volunteers, and even the skaters themselves should be trained on how to properly inspect equipment. Inspecting the equipment before and after each use will help you stay on top of necessary repairs and maintenance. You can help extend the life of equipment with regular upkeep (cleaning, drying before storing out of direct sunlight) and implementing weight limits for participants using certain types of equipment (i.e. ice sleds). If you are accepting in-kind donations, be sure to thoroughly inspect all equipment prior to use. It is recommended for programs to maintain written record of equipment inspections, repairs, and modifications.
Prior to serving skaters with disabilities, take time to visit the skating facility and meet with the manager to evaluate the venue’s accessibility. A sample checklist to guide your assessment is provided below. It may also be helpful to have the skater visit the facility prior to the first lesson to do a walk through, as they may be able to point out accessibility issues you may have not taken into account. Don’t be too concerned if a skating facility does not have all the items listed. It is most important that you focus on the elements to meet the needs of your particular skaters.

The ADA requires public spaces, including skating facilities, to meet certain standards for accessibility. If you encounter an issue at the facility, work together with the manager to plan appropriate modifications.

Prior to every lesson, do a brief check of the facility to ensure pathways are clear of obstructions. Remember that in spite of the best planning, issues may arise, so be flexible and keep lines of communication open between the manager and your skater.

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**SKATING FACILITY ACCESSIBILITY CHECKLIST**

**BUILDING ACCESS**

- Are there enough clearly-marked, handicapped parking spaces that are reasonably close to the main entrance of the building?
- Are stairs required to access the building or is a ramp available?
- Is there a push button to automatically open doors, or is staff available to assist those in need?

**ICE ACCESS**

- Are stairs required to get down to the ice, or is a ramp available?
- Is there a lip or step up required to get onto the ice? Is there another possible entrance to the ice surface?
- Is the width of the entrance to the ice adequate?
- If the team boxes will be used, are they open and accessible?

**FACILITIES ACCESS**

- Are restrooms and changing areas near the ice and do they have accessible areas?
- Are water stations near the ice and at a height that is accessible to all?

**EQUIPMENT ACCESS**

- Will equipment be placed in an area near to the ice and accessible for all?
- Will someone be available to help with fitting and adjustments?
- Will equipment storage be available for ongoing lessons? If so, is it appropriately sized for adaptive equipment and accessible to all?
NEEDS ASSESSMENT

It is recommended to conduct a needs assessment prior to starting an adaptive skating program. Consider the skaters you may serve, get to know more about them, and determine how you can best meet their needs. A needs assessment should provide the following information: Who is interested in participating, what are their potential concerns or barriers to entry? What community resources are available in terms of adaptive equipment, potential volunteers, marketing, and resources? A needs assessment will also help shape whether you have enough potential participation to start a program specifically for skaters with disabilities, or if you should consider an inclusion model for a small number of skaters into your existing programs.

Survey the local community for organizations that currently serve individuals with disabilities. If possible, meet with them to learn more about the individuals they serve, and the successes and challenges of their program. Speaking directly with potential adaptive skaters and their families is another way to conduct the needs assessment.

Organizations that serve individuals with disabilities:
- Schools
- Summer camps
- Adaptive sports organizations
  - Chapters of Disabled Sports USA
  - U.S. Paralympic Sport Clubs
  - Special Olympics
- Medical services
  - Hospitals
  - Rehabilitation centers
  - Therapy clinics – physical speech, occupational and recreational therapy
- Local and state government agencies

BEST PRACTICES FOR INCREASING PARTICIPATION

Once the needs assessment is completed, you will have a better understanding of who you will serve. Next, it is important to design a program that is accessible for individuals with disabilities, and work toward marketing directly to them.

Common barriers to participation:
- Time and length of programming: Schedule youth programs around school hours. Pick a time that doesn’t conflict with clinical services at the local rehabilitation hospital. Length of lessons should be tailored to be appropriate for the skater, with consideration for their stamina. Just like with other youth programs, ages and attention spans should be taken into account when designing curriculum for adaptive youth skaters.
- Location: Is the skating facility accessible? Located near public transportation? If public transportation is not available, will the program provide a transportation option for those who may not be able to drive themselves? If working with a school or rehabilitation hospital, consider providing a shuttle to encourage larger group participation.
- Cost: Is there a way to provide free or needs-based subsidized programming to skaters? Can you work with the rink to provide free or discounted equipment rentals? Make sure to consider all costs involved in skating, such as lessons, equipment purchases or rentals, competition entry fees and travel. Consider offering a free learn to skate clinic to pique interest in enrolling for lessons.
- Fear: May be related to trying something new, or perhaps fear of related risks that could result in injury. As with any potential skater, a lack of knowledge about the sport or fear of trying something that they deem too difficult may be a major hindrance in participation. Fears can often be overcome by learning how skating can be adapted for people with disabilities, and knowing an instructor is experienced and qualified to teach adaptive skating. As a skating professional, your role will be essential in shaping the skater’s experience and promoting skating as a fun and safe activity. By making the skater comfortable and creating a positive and successful first experience, you will encourage continued participation. One potential way to help newcomers overcome their initial fear is to host a clinic that allows skaters to try the sport prior to signing up for lessons. You could also invite family or friends in an inclusive lesson experience, as they can help provide motivation for initial participation, provide a calming presence on the ice, and encourage continued success as an activity the skater and family can do both independently and together.

MARKETING, RECRUITMENT & OUTREACH

It is important to consider some of the unique needs adaptive skaters have when marketing the program to help ensure maximum participation.
COMMUNICATION TIPS

It is also important that staff are able to properly communicate with skaters with disabilities. First, ensure that whoever is the point person for the program is responsive to email and phone inquiries. First-time participants may simply choose not to attend a program if they feel their questions are taking too long to be answered.

Once a skater is registered for the program, let them know when they should expect to hear from you next, and what information will be provided. In each outreach, continue to provide enough information to answer any questions the skater might have, but try not to overwhelm them with information. When working with skaters with cognitive impairments, more frequent communication with smaller bits of information might be required. When initially registering a skater, you can ask how they prefer to be communicated with and whether it is via email, phone or text, and try your best to follow up with their preferred communication method. Refrain from providing too much information via phone without following up with an email as the information might not be retained.

It is also a good idea to build redundancies into communication plans, as skaters with disabilities may have medical appointments or other health issues that prevent the skating program from being top of mind. If multiple emails go unanswered, consider following up. While this may require more effort at the outset, it will prevent the common pitfall of no-shows that sometimes plague adaptive programs that aren’t diligent with their pre-program communication. Be sympathetic to the fact that those with a person with a disability in their family may have a lot of additional logistics to address just to get to a session and that consistent attendance may not always be possible. Be flexible wherever possible.

Encourage volunteers and coaches in the skating program to pursue additional training that will help with their understanding and communication. Refer to resources for agencies that can offer free supplemental training for volunteers such as psychamor.org or disabledsportsusa.org.

ROLE OF PARTNERS & PARTNERSHIPS

As with any skating program, partners are important in helping to create and sustain a program. Partners can help with marketing to potential skaters, provide guidance on how to set up an adaptive program, share equipment or facilities, or be a source of volunteers. Because one program cannot completely serve all the needs of a person with a disability, working with partners who are already involved in the lives of these skaters will ensure they are being provided with a depth of well-rounded services.

Potential partnerships:

- Within the skating community: Programs who have successfully started an adaptive or inclusive skating program can be a great resource of information whether you have questions on how they initially found skaters, how they were able to adapt equipment or movements to a particular athlete’s disability, or how they worked with their rink to make it as accessible as possible. Don’t hesitate to reach out to peers, take successful ideas and work them into your program.
- Disability sports organizations: A local adaptive sports program, whether or not they provide a skating program, can be a wealth of information on the local adaptive athlete population and be a good source for potential volunteers or equipment sharing. Setting up a meeting with a local program during your initial needs assessment will likely highlight new ideas for marketing or programming considerations you may not have previously considered.
- Healthcare and education establishments: Working to build a relationship with the local rehabilitation hospitals or special needs schools (i.e. schools for the blind or deaf) will be a worthwhile time investment in the long-term sustainability of your program. The rapport you build with the local recreation therapists or teachers will help ensure they promote your program to potential skaters. These people can become some of your strongest advocates in the community. In addition to referring participants, they could also help recruit volunteers, equipment resources, or ideas for potential future funding sources.

While you may have a skating program that exclusively serves skaters with disabilities, this does not have to be the only approach. Inclusive programs, in which individuals with disabilities participate alongside peers without disabilities, are an excellent option with many added benefits.
For more information, please contact:

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Colorado Springs, CO 80906
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719.635.5200

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