



***Special Olympics***

**POWERLIFTING COACHING GUIDE**

Teaching Powerlifting Skills



---

Table of Contents

Teaching Skills .....3  
    Warming Up and Stretching .....4  
    Training for Muscle Balance.....4  
    High Risk Exercises .....4  
Stretching .....6  
    Upper Body .....7  
    Lower Body .....9  
    Low Back & Glutes.....11  
Stretching - Quick Reference Guidelines .....12  
Cool-Down .....13  
Basic Skills .....14  
Squat.....14  
    Skill Progression – Squat .....17  
    Faults & Fixes Chart – Squat .....18  
Bench Press .....19  
    Skill Progression – Bench Press.....22  
    Faults & Fixes Chart – Bench Press.....22  
Deadlift.....24  
    Skill Progression – Deadlift .....26  
    Faults & Fixes Chart – Deadlift .....27  
Supplementary Exercises .....28  
Weekly Workout Schedule.....33  
Modifications and Adaptations .....34  
Cross Training in Powerlifting .....36



## Teaching Skills

When teaching powerlifting skills to Special Olympics athletes, increased emphasis should be given to the following:

- Teaching for transfer
- Conditions that will produce the most retention
- The type of teaching cues employed
- The nature of the learning environment

It is extremely important for the coach to determine to what extent the athlete is able to transfer from one task to the next. If he or she can only learn specifics, then each new task will require a review of basic information to achieve success. This must be recognized to avoid negative results. With the athlete who can generalize concepts and principles, this review may not prove necessary. The importance of recognizing each athlete's learning potential cannot be overstressed. Progress and results will vary greatly from one athlete to another.

An emphasis must be placed, particularly during the initial stages of instruction, on the acquisition of effective work methods and habits. These will often determine the ultimate success or failure of the task. Due to some athletes' lower level of retention; they must be constantly reminded of materials and concepts presented through review. It cannot be taken for granted that all of the instruction will be retained from week to week.

Repetition is essential for the Special Olympics athlete to learn each of the powerlifts. Repeat correct form as often as possible. Break up the lifting into separate movements if necessary. Remember walking is a pretty complex series of movements and much more difficult than squatting, deadlifting, or benchpressing. Your athletes learned to walk with repetition, and they can learn to lift correctly with repetition. Make sure to use no weight or very light weight when teaching correct form.

It may be necessary to develop a base level of muscle tone and strength in athletes who are deficient in these areas. This may require use of machines to develop muscle tone and strength before moving on to the more complex exercises with free weights. Never hurry the athlete toward competition. It may take four to five months of progressive training before the athlete is ready for competition.

- Visual information and physical prompting and assistance are more effective than excessive verbal cues when coaching Special Olympics athletes.
- Too many words may confuse athletes over a short period of time and bore them during longer explanations. However, an athlete who is having difficulty with a specific motor task often can benefit greatly from a well-time, succinct verbal cue.
- When training your athletes, develop very simple verbal and appropriate tactile (touching) cues. Develop a series of tactile and verbal cues that can be used to get the athlete "set" for the lift. Examples include touching the chin in the squat and deadlift to keep the head up along with pulling back gently on the belt to keep the hips back. When instructing an athlete in the deadlift, an effective way to prevent the athlete from rounding the bar is to place one hand on the shoulder and pull back while pushing in with the other hand on the lower back. To get the athlete to put the bar at the correct location on the chest in the bench press, touch the place on the chest where the athlete should place the bar. During training sessions, you may be effective using the verbal cue "stop" when the bar is at chest and again when the athlete's arms are at full extension so the athlete will learn to wait for the referee's signals ("press" and "rack" at these two positions).
- Training videos have also proven effective in teaching powerlifting skills. Video offers clear, visual information without an excess of lengthy verbal explanations. If video is used, the coach should align the Special Olympics athlete with the screen so that the athlete can see the image and mimic the powerlifting positions of the model athlete being displayed on the video screen.
- When presenting concepts, it is best to go from simpler tasks to the more complex. It is for this reason that lead-up activities are vital prior to teaching the more difficult exercise movements. More will be achieved when a training session is broken up into a number of partial tasks rather than when the complete task is practiced over and over. An example is teaching each part of the competitive lift with its separate command, one step at a time.



The bench press involves the three commands of “start,” “press” and “rack” so each would be covered separately before moving on to working the complete lift with each command.

### Warming Up and Stretching

The correct sequence of preparation for exercise is warming up, stretching, exercising, stretching, and cooling down. The importance of warming up prior to exercise cannot be stressed enough.

- From a physiological aspect, warm-up prepares the muscles, nervous system, tendons, ligaments, and cardiovascular system by raising the body temperature.
- From a psychological aspect, warm-up helps prepare the athlete mentally by beginning the concentration necessary to complete the exercise routine or weight training workout.
- Further, warm-up reduces injury, since warm muscles and their connectors are more flexible and easily stretched.

The three types of warm-up are *passive*, *general*, and *specific*.

- **Passive** warm-up increases the body temperature by external means. For example, a warm shower or heat lamp are passive warm-ups.
- **General** warm-up occurs when the athlete performs major muscle group movements not associated with the activity about to be done. For example, jogging and rope jumping are two common forms of general warm-up.
- **Specific** warm-up mimics the specific event to be done and is most important for the actual event: for example, doing squats or bench presses with no weight or a stick or with light resistance.

Flexibility is the ability to move a joint through the full range of movement it is designed to do. Hold stretches from 10 to 20 seconds, repeating as necessary. Do not bounce while stretching. The stretching exercises illustrated [here](#) are safe, easy, and increase flexibility.

Partner stretching is a fun way for athletes to work through what is sometimes the most tedious part of the workout. Variations of the [stretches](#) can be done with other athletes or a coach with excellent results. As with the individual stretching, it is important that the athlete (or coach) does not bounce when stretching. Caution should be used, and the athletes should not stretch beyond their limits.

### Training for Muscle Balance

For every push exercise, a pull exercise should be performed. Balance of opposite muscle groups will help prevent injuries in short-term as well as long-term training. Training for balance will also prevent the over work of one group of muscles or the wear on joints that occurs from the lack of balanced muscle training.

- For balanced shoulders (one of the areas of the body most vulnerable to injury), make sure bent rows or low pulls are done regularly to balance the push exercises such as the bench press and incline bench press.
- Leg curls and stiff-legged deadlifts should be done to balance the work done with the front of the thighs from squatting.
- Crunches and bent leg sit-ups should be performed to balance the work done with the lower back from squats and deadlifts.

### High Risk Exercises

Some weight training exercises may have a relatively high degree of risk or hazard and should only be done with extreme care or not at all.

- Dips or behind-the-neck presses place a high degree of stress on the shoulder joint and should be avoided.
- Behind-the-neck press places the neck and shoulders in a vulnerable positions.
- Bench squats place a high amount of stress on the spine and should also be avoided.



## Special Olympics Powerlifting Coaching Guide Teaching Powerlifting Skills

---

- Negatives and overloads place a lot of stress on the athletes' joints, ligaments, and muscles and should not be done. These exercises are generally overrated when considering the risks and long-term problems they can create.



## Stretching

Flexibility is critical to an athlete's optimal performance in both training and competition. Flexibility is achieved through stretching. Stretching follows an easy aerobic jog at the start of a training session or competition.

Begin with an easy stretch to the point of tension, and hold this position for 15-30 seconds until the pull lessens. When the tension eases, slowly move further into the stretch until tension is again felt. Hold this new position for an additional 15 seconds. Each stretch should be repeated 4-5 times on each side of the body.

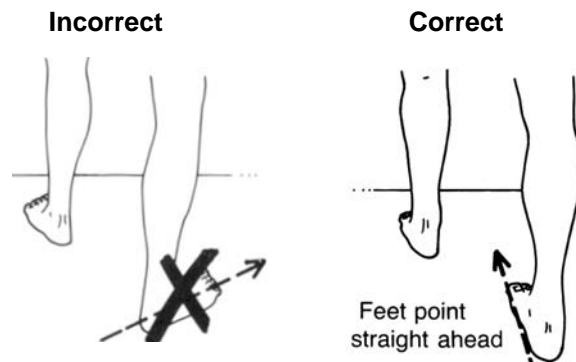
It is also important to continue to breathe while stretching. As you lean into the stretch, exhale. Once the stretching point is reached, keep inhaling and exhaling while holding the stretch. Stretching should be a part of everyone's daily life. Regular, daily stretching has been demonstrated to have the following effects:

- ♦ Increase the length of the muscle-tendon unit
- ♦ Increase joint range of motion
- ♦ Reduce muscle tension
- ♦ Develop body awareness
- ♦ Promote increased circulation
- ♦ Make you feel good

Some athletes, like those with Down Syndrome, may have low muscle tone that makes them appear more flexible. Be careful not to allow these athletes to stretch beyond a normal, safe range. Several stretches are dangerous to perform for all athletes, and should never be part of a safe stretching program. These unsafe stretches include the following:

- ♦ Neck Backward Bending
- ♦ Trunk Backward Bending
- ♦ Spinal Roll

Stretching is effective only if the stretch is performed accurately. Athletes need to focus on correct body positioning and alignment. Take the calf stretch, for example. Many athletes do not keep the feet forward, in the direction that they are running.



This Coaching Guide will focus on some basic stretches for major muscle groups and will start at the top of the body and work our way to the legs and feet.



## Upper Body

**Chest Stretch**



- Raise arms at sides of body
- Pull hands back as far as possible for 20 seconds
- Feel the stretch in the chest
- Repeat

**Side Stretch**



- Keep knees slightly flexed
- Stand or sit with arms overhead
- Hold elbow with hand of opposite arm
- Pull elbow behind head gently as you slowly lean to side until mild stretch is felt
- Hold 10 to 15 seconds
- Repeat on other side



### Arm Circles



- Swing arms forward in large circles
- Repeat going forward and backward

### Neck Stretch



- Roll the neck from shoulder to shoulder with chin touching body at all times
- Do not perform full circles as they may hyperextend the neck
- Tell athlete to roll neck to right, center and left; never have the athlete roll neck backward

### Shoulder Stretch



- Sit on floor with left leg straight out in front
- Bend right leg, cross right foot over, place outside left knee
- Bend left elbow and rest it outside right knee
- Place right hand behind hips on floor
- Turn head over right shoulder; rotate upper body right
- Hold 10 to 15 seconds
- Repeat on other side
- Breathe slowly





## Lower Body

### Standing Quad Stretch



- Stand with foot flat on ground
- Bend knee toward buttock while grasping ankle with hand
- Pull foot directly toward buttock
- Do not twist knee
- Stretch can be done standing alone or balancing with partner, fence and/or wall
- If pain is felt in knees during stretch and foot is pointing out to the side, point foot back to relieve stress

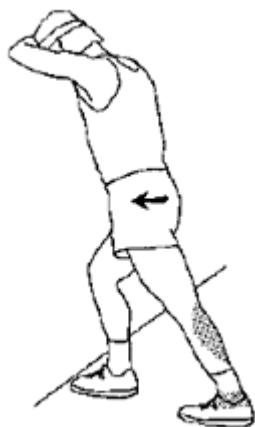
### Forward Bend



- Stand, arms outstretched overhead
- Slowly bend at waist
- Bring hands to ankle or level without strain



### Calf Stretch



- Bend forward leg slightly
- Bend ankle of back leg
- Athlete may also stand facing a wall/fence
- Bend both knees to ease strain



## Low Back & Glutes

### Side Straddle Stretch



- Stand with feet flat on the ground
- Lean body to one side, bending knee slightly
- Keep opposite leg straight
- Repeat with other leg

### Hurdle Stretch



- Sit on floor, legs straight out at sides
- Bend left leg in at knee
- Slowly bend forward from hips toward foot of straight leg until you feel slight stretch
- Do not dip head forward at start of stretch
- Hold this developmental stretch 10 to 20 seconds
- Repeat on other side
- Position foot of straight leg upright, ankles and toes relaxed
- Use a towel if you cannot easily reach your feet

### Hip Stretch



- Lie on floor, legs straight
- Bend left knee, extend left arm straight out from side
- Use right hand to pull knee across body
- Turn head toward left arm
- Keep shoulders flat on floor, feet and ankles relaxed
- Hold for 10 to 20 seconds
- Stretch both sides



---

## Stretching - Quick Reference Guidelines

### **Start Relaxed**

Do not begin until athletes are relaxed and muscles are warm

### **Be Systematic**

Start at the top of body and work your way down

### **Progress from General to Specific**

Start general, then move into event-specific exercises

### **Easy Stretching before Developmental**

Make slow, progressive stretches

Do not bounce or jerk to stretch farther

### **Use Variety**

Make it fun

Use different exercises to work the same muscles

### **Breathe Naturally**

Do not hold your breath

Stay calm and relaxed

### **Allow for Individual Differences**

Athletes start and progress at different levels

### **Stretch Regularly**

Always include time for warm-up and cool-down

Stretch at home



## Cool-Down

The cool-down is as important as the warm-up; however, it is often ignored. Stopping an activity abruptly may cause pooling of the blood and slow the removal of waste products in the athlete's body. It may also cause cramps, soreness and other problems for Special Olympics athletes. The cool-down gradually reduces the body temperature and heart rate and speeds the recovery process before the next training session or competitive experience. The cool-down is also a good time for the coach and athlete to talk about the session or competition. Note that cool-down is also a good time to do stretching. Muscles are warm and receptive to stretching movements.

<b>Activity</b>	<b>Purpose</b>	<b>Time (minimum)</b>
Slow aerobic jog	Lowers body temperature Gradually lowers heart rate	5 minutes
Light stretching	Removes waste from muscles	5 minutes



## Basic Skills

Proper form is critical to receive maximum benefit from each primary and secondary exercise and to improve efficiency of lifts. Good form and technique are essential for preventing injuries. Because of particular body type or physical limitations, form may vary to a degree between athletes.

All lifts should be done slowly with the athlete under control through the entire range of motion. Rapid lifts should be limited and should only be done by advanced athletes approaching competition. This type of training should not be done at the expense of proper form or whenever pain or discomfort is felt by the athlete.

## Squat

This is probably the most difficult of the three power-lifts for Special Olympics athletes to master. However, with patience and repetition, most athletes can perform this lift. This exercise contributes to the overall strength of the athlete more than any other exercise. Even if the athlete is not going to compete in the lift, the squat should be included in training because of its many benefits. It is often beneficial to have the athlete develop a base level of muscle tone through the use of easier-to-learn exercises (leg press, leg extension, and leg curl) prior to squatting. When the athlete has developed this base, it is important to work on the form with no weight before actually squatting with the Olympic bar and plates, no matter how light. Repetition is the key here! Find the proper stance for the athlete through trying both the narrow and wide stances. Because of the relative inflexibility at the calf and Achilles tendon, many athletes will not be able to squat with any degree of control with less than a shoulder-width stance. Use a wider stance with toes out, buttocks and knees back to allow the lower leg to be vertical with the ground, chest high, back straight, and chin up. This is easier for the athlete to learn and is more mechanically efficient.

As a way to teach the squat, instruct the athletes to start with hands straight ahead to improve balance. Also, the use of a mirror in front of the athlete while learning to squat can be beneficial.

The powerlifting athlete should train for the squat the same way the athlete would compete in a squat competition. The signal “squat” at the beginning of the lift and “rack” at the completion of the lift allow the athlete to become completely familiar with the signals of the movement.

The following describes a competition format; athletes should be trained accordingly.

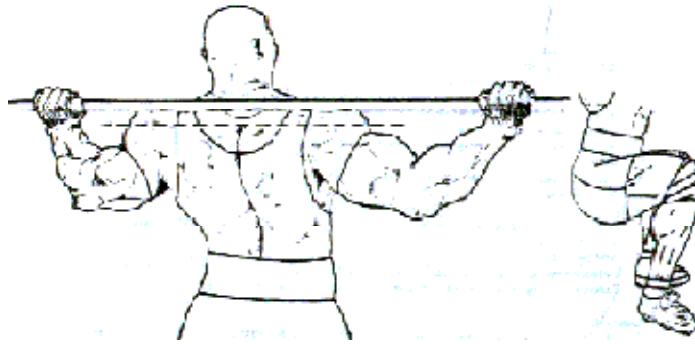
- The lifter shall face the front of the platform. The bar shall be held horizontally across the shoulders, hands and fingers gripping the bar, and the top of the bar not more than the thickness of the bar below the outer edge of the shoulders. The diagram below indicates the legal position of the bar across the shoulders. The hands may be positioned anywhere on the bar inside and or in contact with the inner collars.
- After removing the bar from the racks, (the lifter may be aided in removal of the bar from the racks by the spotter / loaders) the lifter must move backwards to establish the starting position.
- When the lifter is motionless, erect (erect to mean not leaning forward from the waist more than an angle of 15 degrees) with knees locked, and the bar properly positioned the Chief Referee will give the signal to begin the lift. The signal shall consist of a downward movement of the arm and the audible command “Squat”. Before receiving the signal to “squat” the lifter may make any position adjustments within the rules, without penalty. For reasons of safety the lifter will be requested to “Replace” the bar, together with a backward movement of the arm, if after a period of five seconds he is not in the correct position to begin the lift. The Chief Referee will then convey the reason why the signal was not given.
- Upon receiving the Chief Referee’s signal the lifter must bend the knees and lower the body until the top surface of the legs at the hip joint is lower than the top of the knees. Only one decent attempt is allowed. The attempt is deemed to have commenced when the lifters knees have unlocked. The bar may move from its starting position downwards on the lifters back the thickness / diameter of the bar during the performance of the lift.
- The lifter must recover at will to an upright position with the knees locked. Double bouncing at the bottom of the squat attempt or any downward movement is not permitted.
- When the lifter is motionless (in the apparent final position) the Chief Referee will give the signal to rack the bar.



The signal to rack the bar will consist of a backward motion of the arm and the audible command “Rack.”

- The lifter must then return the bar to the racks. For reasons of safety the lifter may request the aid of the spotter/loaders in returning the bar to, and replacing it in the racks. The lifter must stay with the bar during this process.

The diagrams below indicate the legal bar position and required depth in the squat:



The coach’s use of touch control and holding the athlete by the belt and shoulder can be effective in getting him or her into proper position and form. This should only be done in the early stages of learning the lift. If the athlete becomes dependent on a touch control or assistance, this will affect his or her performance in competition where touch and assistance are not allowed.

Although not necessary, an athlete may wear a belt and wraps while squatting. Make sure the athlete does not bounce at the bottom of the movement.

When doing repetitions, the use of the “squat” command is appropriate at each repetition. However, the “rack” command is used only after the completion of the last repetition. The athlete should pause between every two repetitions so as to master the technique of the squat lift.

The spotter should stand behind the athlete. No assistance should be given to the athlete by the spotter unless it is for the purpose of teaching the technique or helping an athlete who cannot complete the lift. Always encourage your athlete to complete the lift.

**Facing the Bar**



**Getting Under the Bar**





**In Position**



**Slightly Below Parallel Position**



**Fully Erect Position**



**Rack**







---

### Skill Progression – Squat

---

Your Athlete Can:	Never	Sometimes	Often
Approach the bar and set themselves evenly, under the bar.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safely remove the bar from the rack, without assistance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Achieve the proper start position.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Understand and execute the Squat Command.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Achieve proper depth.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recover at will and assume the finishing position.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Understand and execute the Rack Command.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

---

### Totals

---

NOTE: Medical Restriction: An athlete with Down Syndrome who has been diagnosed with Atlanto-Axial Instability may not participate in the back squat lift in powerlifting.

### Coaching Tips

- Always emphasize proper form and technique.
- Always encourage and support your athlete through the lift.
- Instill the proper sequence of commands.
- Maximize your athletes' potential.
- Always consider that bad form may be the result of too much weight!



**Faults & Fixes Chart – Squat**

Error	Correction
Athlete does not listen or execute the commands	Consistently remind the athlete of the commands Provide verbal prompts Verbal praise for success
Athlete does not achieve proper depth	Demonstrate/adjust form/technique Give your athlete verbal Prompt “lower” Consider Flexibility and/or Foot Position Reduce the weight Have the athlete perform lift with no weights Repetition of correct form/technique Verbal praise for success
Athlete has foot movement after squat command has been given	Demonstrate/adjust form/technique Give your athlete verbal prompts Repetition of correct form/technique Verbal praise for success
Athlete does not ascend with weight	Demonstrate/adjust form/technique Repetition of correct form/technique Verbal prompt “up” Reduce weight Verbal praise for success
Athlete leans too far forward in ascent	Demonstrate/adjust form/technique Repetition of correct form/technique Have the athlete perform lift with no weights Verbal prompt “head up or shoulders back” Reduce weight Verbal praise for success



## Bench Press

The following describes a competition format; athletes should be trained accordingly.

- The lifter must lie on his back with head, shoulders and buttocks in contact with the bench surface. The feet must be flat on the floor (as flat as the shape of the shoe will allow). His hands and fingers must grip the bar positioned in the rack stands with a thumbs around grip. This position shall be maintained throughout the lift. To achieve firm footing the lifter may use flat surfaced plates or blocks not exceeding 30 cm in total height to build up the surface of the platform. Blocks in the range of 5 cm, 10 cm, 20 cm, 30 cm, should be made available for foot placement at all international competitions.
- The spacing of the hands shall not exceed 81 cm measured between the forefingers (both forefingers must be within the 81 cm marks and the whole of the forefingers must be in contact with the 81 cm marks if maximum grip is used). If in the case of some old injury or anatomically the lifter is unable to grip the bar equally with both hands he must inform the referees prior to lift-off for each attempt and if necessary the bar will be marked accordingly. The use of the reverse grip is forbidden.
- After removing the bar from the racks, with or without the help of the spotter/loaders, the lifter shall wait with elbows locked for the Chief Referee's signal.
- The signal shall be given as soon as the lifter is motionless and the bar properly positioned. For reasons of safety the lifter will be requested to "Re-place" the bar, together with a backward movement of the arm, if after a period of five seconds he is not in the correct position to begin the lift. The Chief Referee will then convey the reason why the signal was not given.
- The signal to begin the attempt shall consist of a downward movement of the arm together with the audible command "Start."
- After receiving the signal, the lifter must lower the bar to the chest (the chest, for the purpose of the rule, finishes at the base of the sternum/breastbone), hold it motionless on the chest, after which the Chief referee will signal the audible command "Press."
- The lifter must then return the bar to arms length with no excessive/immoderate uneven extension of the arms.
- When held motionless in this position the audible command "Rack" shall be given together with a backward motion of the arm.

Any change in the elected lifting position during the lift proper (i.e. any raising movement of the head, shoulders, or buttocks, from the bench, or movement of the feet on the floor/blocks/plates or lateral movement of hands on the bar) will result in a no-lift.

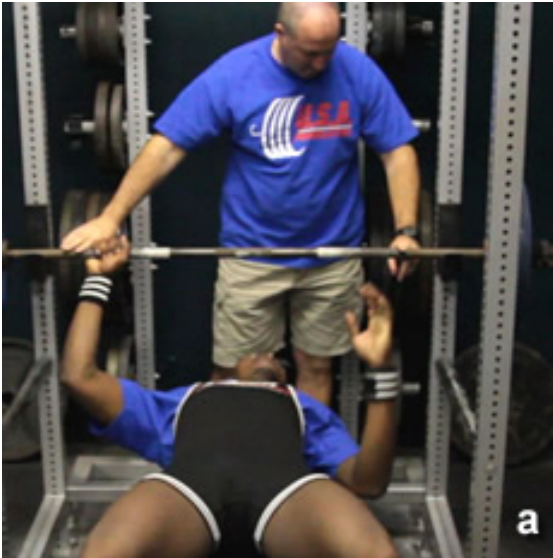
If, anatomically, the arms cannot be fully extended, the lifter must declare this at weigh-ins prior to competition. The maximum allowable is 15 degrees out of true.

As with the squat, the athlete should learn to perform the bench press with little or no initial resistance. A stick can be used to simulate the bar while the athlete performs a high number of repetitions. For the athlete to learn where the bar should rest, the coach may touch the athlete's chest at the sternum to illustrate where the athlete should bring the bar down.

Additionally, the coach may place a hand at the point where the bar will be locked out to give the athlete a target for completing the lift.



**Placement of Athlete's Hands**



**Placement of Athlete's Head**



**Coach Hands Off to Athlete**



**"Start"**





**Bar Motionless at Chest**



**“Press”**



**“Rack”**





**Skill Progression – Bench Press**

<b>Your Athlete Can:</b>	<b>Never</b>	<b>Sometimes</b>	<b>Often</b>
Properly position themselves on the bench, without assistance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evenly set their hands on the bar, without assistance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Achieve the proper start position.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Understand and execute the Start Command.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Achieve the proper press position.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Understand and execute the Press Command.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Achieve the proper finish position.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Understand and execute the Rack Command.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Totals</b>			

**Coaching Tips**

- Always emphasize proper form and technique.
- Always encourage and support your athlete through the lift.
- Instill the proper sequence of commands.
- Maximize your athletes’ potential.
- Always consider that bad form may be the result of too much weight!

**Faults & Fixes Chart – Bench Press**

<b>Error</b>	<b>Correction</b>
Athlete does not listen or execute the commands	Consistently remind the athlete of the commands Provide verbal prompts Verbal praise for success
Athlete does not achieve proper start position	Consider Foot and/or Body Position Demonstrate/adjust form/technique Give your athlete verbal Prompt “hold it” or “hold it high” while holding bar in place until they can hold it in the locked out position



	<p>Reduce the weight</p> <p>Have the athlete perform lift with no weights</p> <p>Repetition of correct form/technique</p> <p>Verbal praise for success</p>
Athlete does not hold bar at chest for press command	<p>Demonstrate/adjust form/technique</p> <p>Give your athlete verbal Prompt “hold it” while holding bar in place until they can hold for the “press” command</p> <p>Reduce the weight</p> <p>Have the athlete perform lift with no weights</p> <p>Repetition of correct form/technique</p> <p>Verbal praise for success</p>
Athlete raises their head or buttocks	<p>Demonstrate/adjust form/technique</p> <p>Give your athlete verbal prompt “butt down”</p> <p>Reduce the weight</p> <p>Have the athlete perform lift with no weights</p> <p>Repetition of correct form/technique</p> <p>Verbal praise for success</p>
Athlete does not push weight to full extension upon receiving the press command	<p>Demonstrate/adjust form/technique</p> <p>Give your athlete verbal Prompt “push it”</p> <p>Reduce the weight</p> <p>Have the athlete perform lift with no weights</p> <p>Repetition of correct form/technique</p> <p>Verbal praise for success</p>
Athlete does not hold the bar for the signal “rack”	<p>Demonstrate/adjust form/technique</p> <p>Give your athlete verbal Prompt “hold it” while holding bar in place until they can hold for the “rack ” command</p> <p>Reduce the weight</p> <p>Have the athlete perform lift with no weights</p> <p>Repetition of correct form/technique</p> <p>Verbal praise for success</p>



## Deadlift

The following describes a competition format; athletes should be trained accordingly.

- The lifter shall face the front of the platform with the bar laid horizontally in front of the lifter's feet, gripped with an optional grip in both hands and lifted until the lifter is standing erect.
- The lifter will then pull the bar to erect position with no support on the thighs and no downward movement of the bar. Any rising of the bar or any deliberate attempt to do so will count as an attempt. Once the attempt has begun no downward movement is allowed until the lifter reaches the erect position with the knees locked. If the bar settles as the shoulders come back (slightly downward on completion) this should not be reason to disqualify the lift.
- On completion of the lift, the knees shall be locked in a straight position and the shoulders back.
- The Chief Referee's signal shall consist of a downward movement of the arm and the audible command "Down." The signal will not be given until the bar is held motionless and the lifter is in the apparent finished position.

Correct form should also be practiced in the dead-lift. Using a straight back and pushing with the legs as much as possible will reduce the possibility of injury and provide for greater performance. The athlete should be familiar with the command "down" at the completion of the lift when the torso is erect, shoulders are in line with the torso, and the knees are straight. Also, athletes must not drop or slam the weight to the platform. Either the narrow or wide (sumo) stance may be used. Generally, the narrow stance with hands outside the legs is more appropriate for tall athletes. The sumo stance with hands inside the legs works better for the short athlete who has strong legs. Athletes with wide shoulders and narrow hips generally perform better with a narrow stance. Either stance can be used effectively by keeping the bar against the legs. Baby powder can also be used on the thighs to lubricate the upward movement. It is very important that this lift be done slowly with the head back, without bouncing or hitching the bar up the legs, and without rounding the back. The athlete must be taught to deadlift with head up, buttocks down, and back straight. A stick may be used to simulate a bar while establishing proper technique. During the initial learning stage, the coach should hold the athlete's shoulders back and push down on the back of the athlete's belt to reinforce good form as weight is added.

The coach may stand in front of the athlete to help the athlete position the feet, place the athlete's hands on the bar, and position the head in an upward position. The coach should not assist the athlete with the lift, except during the learning phase or if the athlete is having extreme difficulty maintaining correct form.

**Athlete Faces the Bar**



**Athlete Starts Lift on His Own Time**







**Athlete Pulls the Weight**



**Erect Position with  
Knees Locked, Shoulders Back**



**Signal “Down”**





**Skill Progression – Deadlift**

<b>Your Athlete Can:</b>	<b>Never</b>	<b>Sometimes</b>	<b>Often</b>
Properly position themselves at the bar, without assistance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evenly set their hands on the bar, without assistance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Understand there is NO Start Command given.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Perform the lift in one continuous motion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Achieve the proper upright position.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Understand and execute the Down Command.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Totals**

**Coaching Tips**

- Always emphasize proper form and technique.
- Always encourage and support your athlete through the lift.
- Ensure that your athlete understands when the lift should begin.
- Instill the proper down command.
- Maximize your athletes' potential.
- Always consider that bad form may be the result of too much weight!



**Faults & Fixes Chart – Deadlift**

<b>Error</b>	<b>Correction</b>
Athlete does not listen or execute the command	Consistently remind the athlete of the command Provide verbal prompts Verbal praise for success
Athlete lifts with too much forward lean and/or buttocks high	Give your athlete verbal cues. (“touch the bar with your legs, butt down, head up”) Demonstrate/adjust form/technique Reduce the weight Have the athlete perform lift with no weights Repetition of correct form/technique Verbal praise for success
Athlete supports or “hitches” the weight on the legs	Give your athlete verbal cues (“keep pulling” or “don’t stop”) Demonstrate/adjust form/technique Reduce the weight Have the athlete perform lift with no weights Repetition of correct form/technique Verbal praise for success
Athlete does not achieve proper finish positions with the shoulders back or taking a step	Give your athlete verbal cues. (“finish it” or “shoulders back”) Demonstrate/ adjust form/technique Reduce the weight Have the athlete perform lift with no weights Repetition of correct form/technique Verbal praise for success
Athlete does not maintain control of the bar	Give your athlete verbal cues. (“don’t drop it”) Demonstrate/adjust form/technique Reduce the weight Have the athlete perform lift with no weights Repetition of correct form/technique Verbal praise for success



### Supplementary Exercises

Perform those exercises that affect the weaker areas of the body and those that stabilize and provide balance, thus limiting the possibility of injury. The most effective supplementary exercises include the following:

<b>Supplementary Exercises</b>	<b>Muscle Groups Affected</b>	<b>Competition Lift Affected</b>
Leg Raises and Crunches	Abdominal	Squat, Deadlift
Barbell Curl	Bicep	Bench Press (stability)
Dumbbell Press	Shoulder, Tricep	Bench Press
Bent Barbell Row	Upper & Lower Back	Deadlift, Bench Press, Squat
Incline Bench Press	Chest, Shoulder	Bench Press
Upright Row	Shoulder, Tricep, Trapezoid	Bench Press, Deadlift
Lat Pulldown	Upper Back	Squat, Bench Press, Deadlift
Close Grip Bench Press	Close Grip Bench Press	Bench Press
Triceps Pushdowns	Tricep	Bench Press
Leg Press	Thigh	Squat, Deadlift
Leg Extensions	Front Thigh	Squat, Deadlift
Leg Curls	Rear Thigh	Squat, Deadlift
Triceps Extension	Tricep	Bench Press
Stiff Leg Deadlift	Lower Back, Thigh, Biceps	Squat, Deadlift
Step Ups	Thigh	Squat, Deadlift

Supplementary exercises should be performed from 2-3 sets of 8-10 repetitions each. It may be effective to change supplementary exercises as frequently as every four to eight weeks to maintain the athlete's enthusiasm and response to training. From the last week to two weeks before competition, all supplementary exercises can be dropped.

The supplementary exercises and how to perform them are shown below.



### Leg Raises



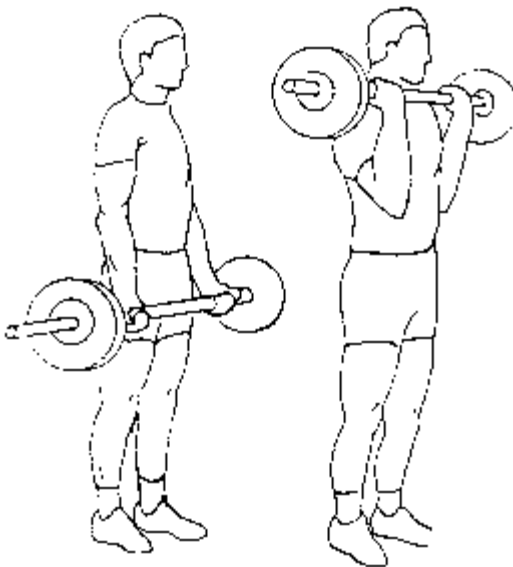
- From a lying position on the bench with buttocks close to the end of the bench and knees straight, raise legs about 45 degrees and return.

### Crunches



- From a lying position with knees bent, bring the chin to the upper chest and bring the shoulders upward.
- Slowly lower the upper body to the starting position and, without bouncing, begin again.

### Barbell Curl



- Stand with feet about shoulder width apart and with a flat back.
- Grasp the barbell with a palms-up grip with the arms fully extended.
- Curl the barbell slowly upward with the elbows stationary until the forearms touch the biceps.

### Dumbbell Press



- With dumbbells at shoulder level, and palms facing forward, press the weight overhead until the arms are fully extended.
- Lower the weight to the starting position and begin again.



- Slowly return the barbell to the starting post and, without any swinging or body assist, begin again.
- This lift may also be done with dumbbells.

### Bent Barbell Row



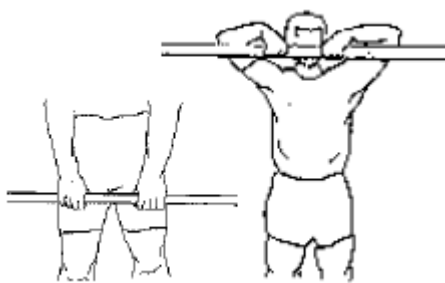
- Stand in a bent over position, with back flat, feet shoulder width apart, and knees slightly bent.
- Holding the barbell with an overhand, shoulder width grip, bring the bar slowly to the chest.
- Slowly lower the barbell to the starting position and start again.

### Incline Bench Press



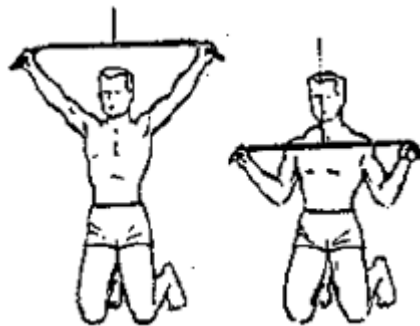
- Lying on the incline press bench, with feet flat on floor and hands on the barbell at about shoulder width, begin the lift with a spotter closely following the bar.
- Slowly take the bar from the rack and bring it to the chest.
- Without a pause or a bounce, push the bar to full extension and start again.

### Upright Row



- Stand in an erect position with hands in an overhand grip holding the barbell at slightly less than shoulder width against the thighs.
- Lift the bar upward with a flat back, and without assisting with legs,

### Lat Pulldown



- From a kneeling or seated position, and leaning slightly back, grasp the lat bar with a wide grip and arms straight and slowly pull the bar to the upper chest.
- Slowly return the bar to the starting position and start again.



- along the abdomen and chest toward chin.
- Lower the bar slowly and under control and start again.
- More weight can be used if the legs are held down.

### Close Grip Bench Press



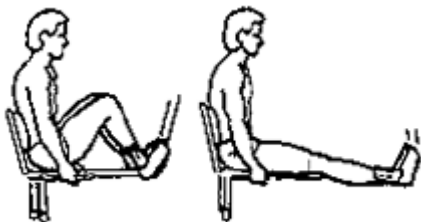
- Lying on a flat bench, with feet flat on floor and hands on the barbell at closer than shoulder width, begin the lift with a spotter closely following the bar.
- Slowly take the bar from the rack and bring it to the chest.
- Without a pause or bounce, push the bar to full extension and start again.

### Triceps Pushdowns



- Standing with the lat bar or a tricep bar grasped with an overhand grip, slowly press down to full extension, keeping elbows slightly forward and close to the sides.
- Slowly return the bar to starting position and start again.

### Leg Press



- In a seated position with feet on press plate(s), slowly press to full extension of the legs.
- Slowly return the weight to starting position and, without bouncing, start again.

### Leg Extensions



- In a seated position, slowly extend legs to a straight position.
- Slowly return to the starting position and, without bouncing, start again.





### Leg Curls



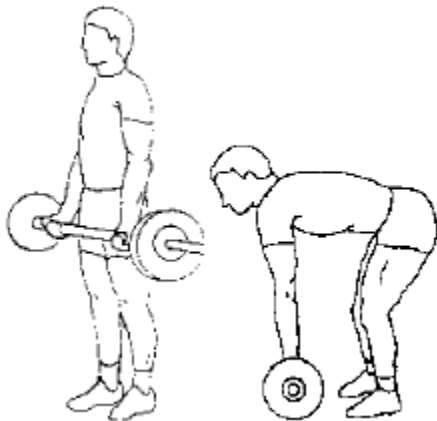
- In a lying position with the back of the ankle pressing against the padded roller, slowly curl the legs to a contracted position.
- Lower slowly to start position and, without bouncing, start again.

### Triceps Extension



- Lying on a flat bench, with feet flat on the floor, arms extended above the face, and hands on the barbell at closer than shoulder width, begin the lift with a spotter closely following the bar.
- Slowly take the bar from the rack or spotter and, keeping the elbows high, lower the bar to a position close to the chin.
- Push the bar to a fully extended position and start again.

### Stiff Leg Deadlift



- Stand in an erect position, with back flat, feet shoulder width apart, and knees slightly bent.
- Holding the barbell with an alternating shoulder width grip, slowly lower the bar to just above the floor while keeping the back flat and knees only slightly bent.
- Without bouncing at the lowest point of the lift, and keeping the back flat and knees only slightly bent, return to the starting position and start again.

### Step Ups



- From a standing position on the floor, holding dumbbells at side, step onto block or raised platform.
- Return to starting position, alternate feet and begin again.





## Weekly Workout Schedule

A variety of workouts is effective. The following are two suggested weekly workout schedules:

### Four-Day Option

Monday	Tuesday	Thursday	Friday
Heavy Squat	Heavy Bench Press	Light Squat	Light Bench Press
Stiff Leg Deadlift (light)	*Close Grip Bench Press	Deadlift	Close Grip Bench Press
Leg Press or Step Ups	Incline Bench Press	Leg Curl	*Upright Rows
Lat Pulldown	Overhead Press (front)	Bent Barbell Row	Barbell Curl
Leg Raises and Crunches	Barbell Curl	*Stiff Leg Deadlift	Tricep Extension
	Leg Raises and Crunches	Leg Raises and Crunches	Leg Raises and Crunches

### Three-Day Option

Monday	Wednesday	Friday
Heavy Squat	Deadlifts	Light Squats
Leg Press	*Stiff Leg Deadlift	*Leg Extensions
Leg Curls	Bent Barbell Row	Leg Curls
Light Bench Press	Close Grip Bench Press	Heavy Bench Press
*Lat Pulldowns	*Tricep Extensions	Incline Bench Press
Tricep Pushdowns	Dumbbell Overhead Press	Lat Pulldowns
*Upright Rows	Dumbbell Curls	Seated Rows
Leg Raises and Crunches	Leg Raises and Crunches	Leg Raises and Crunches

*Note: Precede all workouts with a full warm-up and stretching session.*

*\*Denotes exercises that can be dropped if:*

- 1) athlete is a beginner,*
- 2) time is not available to complete entire routine,*
- 3) faster recovery is necessary.*



## Modifications and Adaptations

The focus of the Powerlifting Coaching Guide is to assist coaches in instructing all athletes to function at their maximum performance level. Realistic goals and objectives should be developed that present a challenge but do not force athletes into experiences loaded with failure. To provide positive experiences means that many athletes will require instructional activities that are adapted to their particular needs. Some examples of activity adaptations include:

### Modifications of Activities

Special Olympics athletes are often denied the chance to learn new skills or activities because they are not physically able to perform the skills exactly according to the direction of the instructor or the instructional guide. The instructor may modify the skills involved in an activity so all athletes are able to participate.

### Accommodating the Athletes

In competition, it is important that rules not be changed to suit several athletes' special needs. However, there are other ways to accommodate athletes' special needs. For example, the sound of the coach's voice can be used to assist visually impaired athletes.

### Encouraging Activity

Coaches can structure lessons so that athletes respond to challenging questions. Such an approach permits athletes with various levels of ability to respond in ways that allow for success. Obviously, variations in response to these questions would be apparent from athlete to athlete depending on the level of ability and severity of impairment.

### Changing the Method of Communication

Athletes sometimes require communications systems that are suited to their needs. For example, verbally explaining a task may not match up well with some athletes' information processing systems. Information that is more specific might be provided in other ways. For example, the instructor could simply demonstrate the sport skill. Some athletes may need not only to hear or see a skill but also to read a description of the skill. This need can be met for poor or non-readers through the use of a poster board to which stick figures are attached to show the task sequence for a skill.

### Modification of Equipment

Successful participation in Special Olympics may sometimes require equipment that has been modified to suit the athlete's particular needs. Fortunately, special equipment may be available.

The squat rack should have the capability for the racks to support the bar close to the inside bar collars or closer in for athletes that prefer placing hands as wide as possible on the bar. This may be achieved using squat racks that tilt inward and locked in place then returned to the original vertical position after the lifter has completed the lift.

An adjustable bench press safety rack feature is required for all powerlifting competitions. The safety racks are set at the correct height for each lifter, high enough to protect the lifter if the bar is dropped during the lift, but not so high as to allow the athlete to strike the bars during proper execution of the lift.

The bar heights, racks in or out and safety rack heights should all be taken and provided to completion officials prior to the start of competition.

### Modified Weight Bench

- ♦ Length: Shall be 2100 mm long overall and be flat and level.
- ♦ Width: The main body of the bench shall be 610 mm wide, but for a distance of 705 mm from the head end, the width shall be 305 mm leaving two equal shoulders of 152.50 mm.
- ♦ Height: The height shall be not less than 450 mm and not exceeding 500 mm measured from the floor to the top of the padded surface of the bench without it being depressed or compacted.
- ♦ Stands: The height of the uprights on both adjustable and non-adjustable benches shall be a minimum of 750 to 770 mm to a maximum of 1000 to 1100 mm measured from the floor to the bar rest position.
- ♦ Minimum width between insides of bar rests shall be 1100 mm.



### **Adaptations**

More specific adaptation for associated impairments are listed below:

#### **Visual Impairments**

- ◆ Assist blind lifters.

#### **Auditory Impairments**

- ◆ Teacher learns and uses sign language.
- ◆ Have coach stand in one place for easy access and reference.



### Cross Training in Powerlifting

Cross training is a modern-day term that refers to the substitution of skills other than the skills directly involved in their performance. Cross training came about as a result of injury rehabilitation and is now also used in injury prevention. When athletes sustain injuries in the legs or feet that keep them from training, other activities can be substituted so that athletes can keep up their aerobic and muscular strength.

There is a limited value and crossover to the specific exercise. A reason to “cross train” is to avoid injury and maintain muscular balance during a period of intense sport specific training. One of the keys to success in sport is staying healthy and training over the long haul. Cross training allows athletes to do event specific training workouts with greater enthusiasm and intensity, or less risk of injury.