



Avoid Weight Room Injuries

Use of weight rooms and weight training may seem relatively safe when compared to contact sports, but the activity is not without risks and serious injury potential. Studies indicate that lower back injury is the most common type of weight training injury, which can translate into large dollar losses. The Pool has recently experienced several injury claims from use of exercise machines that were either defective or improperly used. School districts can reduce the loss potential through careful consideration of factors associated with instruction, supervision, and equipment maintenance.

Instruction

- Use only qualified instructors to teach weight training. It is a highly specialized area of physical fitness. Safe lifting techniques form the basis of an effective weight-training program.
- Attend clinics and workshops conducted by the National Strength and Conditioning Association (NSCA) or American Alliance for Health, PE, Recreation and Dance (AAHPERD). Follow the guidelines published by these organizations and Washington Interscholastic Athletic Association (WIAA.)
- Instruct students on the basics, including warming up before the workout, stretching, cooling down, and the importance of proper breathing.
- Identify correct and incorrect techniques for each exercise. Discuss the techniques used by spotters for each exercise. Post this information with illustrations on the wall, and include it in a handbook.
- Instruct students on hazards and consequences of improper lifting techniques or improper use of equipment and spotters. Document this in the lesson plan.
- Instruct students when to quit and how to recognize pains from overloading and muscle failure.
- Clearly communicate information to students through both lecture and demonstration.
- Teach exercises progressively. Allow free weights only for athletic training or advanced students in physical education.
- Check out students on use of every individual piece of equipment and keep written records of each student's training program and progression.
- Use safety quizzes to measure student comprehension of skills, hazards and rules, and retain quizzes.
- Do not assume that students with higher strength are proficient in basic activities. Verify that each student receives the same standard of care.
- Involve and inform parents so that they are aware of your actions to ensure their children's safety and development.

Post rules for weight room conduct and enforce them at all times. Some examples are:

- Notify instructor of all maximum lift attempts.
- Wear proper footwear in the weight room at all times.
- Use a partner/spotter at all times. Stop and report absent lifting partner immediately.
- Use only equipment you have been instructed to operate.
- Clean up perspiration on benches with disinfectant.
- Always use collars on bars, with no exceptions.
- Weight training needs to be focused and serious. Horseplay will not be tolerated.

Supervision

- The Pool often receives claims indicating that the instructor was not present at the time of an incident. Remember that if you are not in the room, you are not supervising.
- Reinforce good behaviors and correct inappropriate activities. Document and track progress of students to identify potential problems.
- Provide closer supervision for the more hazardous activities, such as using free weights.
- Give special attention to maximum lift attempts. The Pool recommends using a maximum of four repetitions rather than the traditional single repetition.
- Incorporate the buddy system for all free weight activities. Match the strength of partners evenly to ensure that each will be able to spot the other safely. Use additional spotters if the weight being lifted cannot be safely controlled from the single spotter position.
- Establish a code of safe behavior. Post written rules and document them in a handbook. Discuss the information regularly and enforce the rules consistently.
- Instructors must be first aid and CPR certified to provide aid in case of accident and injury.
- Include latex gloves in the first aid kit. Provide training in bloodborne pathogens to staff and students.
- Document all injuries and emergency care and maintain the reports on file for further review.
- Control access to the weight room. Lock the weight room at all times when the instructor is not present. Poorly controlled access after hours has led to injuries to the general public when the weight room was accessible while adjacent facilities were in use.
- Provide proper supervision during open gym by qualified staff and enforce the same rules.

Equipment and Facilities

- Follow the Uniform Fire Code for the capacity requirement of 50 sq. ft. per person.
- Leave enough room between pieces of equipment for safe execution of all activities. Establish a safety zone around each machine or training station. Direct traffic flow away from activities with high injury potential.
- Post warnings for all potentially dangerous conditions.
- Display safety and instructional directions, preferably with illustrations to make the average person understand the risk.
- Have equipment assembled by the manufacturer or its authorized personnel.
- Do not modify equipment without manufacturer's approval as it will void the warranty and put the burden of products liability on the school district.
- Conduct regular facility and equipment inspections and document the inspection for permanent record.
- Perform periodic maintenance such as lubrication of parts or parts replacement as recommended by the manufacturer.
- Immediately remove defective equipment from use.
- Have equipment serviced and repaired by the manufacturer or its authorized repair personnel to make sure that it is repaired properly according to manufacturer's recommendations.
- Make certain that equipment is cleaned and sanitized to prevent spreading of diseases.
- Warn students to stay away from moving weight stacks and other machine parts when machine is in use. Make sure no one uses a machine when another person is changing weights.
- Even though weight machines are considered safer than free weights because the techniques required by free weights need not be present, more people are injured while using machines than using free weights.

Bulletin #61 May/June 2000 *Washington Schools - Risk Management Pool* ©2006 All rights reserved.