Guidelines for Circus Arts Programs

The guidelines are broken down into three sections: Facilities & Operations, Policies & Practices and Curriculum & Staff.

Some of the guidelines have examples or ACE recommendations listed next to them. In examining programs, we realize that there will be legitimate instances where our examples or recommendations would not represent the safest possible policy or course of action. Do not take these examples as hard and unmovable rules, but as pointers in the right direction.

Important terms

You will see some terminology used consistently throughout the guidelines. Most terms will be self explanatory, but three of them warrant special explanation.

"Appropriate"

The guidelines are designed to be flexible and adaptable to many different types of programs. What is "appropriate" for a professional school where equipment sees hundreds of hours of wear every week will be different than what is "appropriate" for a recreational kids program that has eight hours of classes. If you are unsure if your practices are "appropriate" that's fine; that is why your process of recognition includes a real person as your consultant.

"Competent Person"

This is a term from OSHA. It is defined as:

"one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them"

In our field, this simply refers to someone who is able to identify hazards in the space, equipment or classroom and has the clear authority to step in and correct any situation they deem unsafe. Because most circus classes involve a level of risk, everyone on your staff should count as a "Competent Person" in their field.

"Qualified Person"

This is a term from OSHA. It is defined as:

"one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work, or the project."

In our field, this will refers to a higher level of expertise in the subject matter at hand. For example, curriculum should be created by a Qualified person (someone with "extensive knowledge, training and experience"), as opposed to a Competent person (who need only be capable of identifying hazards and dangers). In another example, the rigging design of a space should be handled by a Qualified person, but the rigging check before a class can be a Competent person.

Make sense? If not, don't worry; that's why we have Safety Consultants.

1. Facilities & Operations

1.1. General

- 1.1.1. Embody a "culture of safety," within which all program participants (staff, volunteers and students) experience themselves as responsible and part of the risk management team, actively engaged in an ongoing quest for safety.
- 1.1.2. Model good practices with the expectation and recognition that what students see and experience will be replicated wherever they go next.
- 1.1.3. Create an appropriately welcoming and warm environment for staff, students and visitors.
- 1.1.4. Express and communicate the mission and orientation of the organization through the design and execution of the physical space.
- 1.1.5. Provide a supportive and nurturing environment that fosters learning and teaching.

1.2. Compliance

- 1.2.1. Comply with all applicable industry standards, local codes, and regulations for its intended and actual uses (including, where relevant, public assembly, performance and accessibility).
- 1.2.2. Have and enforce appropriate policies relating to substance use and abuse, including but not limited to alcohol, recreational drugs, prescription and over-the-counter medications, and other mood altering substances.

1.3. Comfort and Accessibility

- 1.3.1. Maintain temperature, humidity, indoor air quality and other environmental factors within a comfortable and acceptable range.
- 1.3.2. Have adequate, clean, accessible restroom facilities sufficient to meet the needs of all users.
- 1.3.3. Provide adequate lighting and visibility for all activities, including rigging and storage areas.
- 1.3.4. Have clearly defined training and performance spaces, with appropriate and adequate separation from observation and public traffic areas.
- 1.3.5. Have appropriate security policies or layout to ensure the safety and security of the space and students.

1.4. Risk Assessment and Management

- 1.4.1. Demonstrate good repair, cleanliness, orderliness and "ship-shapeness".
- 1.4.2. Have a thoughtful program in place for ongoing comprehensive risk analysis and mitigation.
- 1.4.3. Have effective orientation and training programs for staff and volunteers aimed at identifying potential hazards and addressing them, including familiarity with and access to emergency plans and resources.
- 1.4.4. Have a written emergency plan, maintained, up-to-date and accessible.
- 1.4.5. Have qualified personnel on-site and available to deal with emergencies as needed, including appropriately trained first responders with current certifications (this should include First Aid/CPR).
- 1.4.6. Have clearly visible signs and notices identifying relevant policies and potential risks.

- 1.4.7. Have appropriately secured areas for potentially hazardous substances, materials and equipment.
- 1.4.8. Have appropriate first aid kits and equipment fully stocked and available, along with a program to ensure timely restocking as needed.
- 1.4.9. Have at least one AED (Automated External Defibrillator) located in an appropriate location on-site, along with appropriate identifying signage and an approved program of training in its use.
- 1.4.10. Have identified the specific personnel designated as Qualified and Competent Persons with the authority and responsibility for specific tasks and actions, including identifying and addressing hazards.

 e.g. certain staff members may be identified as Competent for checking and hanging equipment, but are not Qualified to assess, design or install points.
- 1.4.11. Have personnel who have completed OSHA training as may be applicable, advisable or required by local, state, and federal law and regulations.
- 1.4.12. Provide appropriate PPE (Personal Protective Equipment) for all identified hazards, including training in its proper use.

 e.g. CPR masks and rubber gloves in the First Aid kit, or appropriate harnesses for riggers working at height.
- 1.4.13. Have MSDS (material safety data sheets) and other hazardous materials information posted and available as appropriate.

1.5. Rigging and Apparatus

- 1.5.1. Have all structural elements, connections to structure, and permanent rigging points designed, implemented or inspected and approved by a Qualified Person to be capable of supporting all intended and potential loading scenarios, including appropriate design factors.
- 1.5.2. Have a method, system, and equipment for the creation of temporary rigging points or connections to structure (as may be required) which has been designed, implemented or inspected and approved by a Qualified Person to be capable of supporting all intended and potential loading scenarios, including an appropriate design factor.
- 1.5.3. Ensure that all temporary rigging is done by or under the direct supervision of a Competent Person.
- 1.5.4. Have means of access to rigging points which allow for regular inspection, maintenance and adjustments to rigging (including attachment and removal of lines and apparatus and the installation of temporary points) without undue risk or inconvenience to the people doing the work or others in the vicinity. This includes fall protection and arrest systems as required by law, regulation, public policy, and common sense. Ensure that persons doing such work are trained in the proper use of personal fall arrest systems (PFAS) and other PPE, as indicated.
- 1.5.5. Have effective means and methods of securing or making equipment inaccessible when it is not intended to be accessible.
- 1.5.6. Ensure that all rigging points and the areas surrounding them are free and clear of potential conflicts or hazards, including but not limited to: proximity to other rigging system components, lighting fixtures, ducting,

- electrical wiring, plumbing and sprinkler pipes and structural members.
- 1.5.7. Have and use (or permit to be used within the facility) only equipment, apparatus and hardware which has been approved by a Competent Person as suitable for its intended and actual uses, taking into account the potential for inadvertent or intentional misuse.
- 1.5.8. Have and use spotting systems and mats on a consistent basis, as determined by a Qualified Person to be appropriate for such uses.
- 1.5.9. Ensure that all equipment (including apparatus, rigging hardware, spotting systems, mats and other relevant components) which is used in the facility is in current good and working condition, by having and consistently applying a program of regular inspection, maintenance and retirement of equipment and installations, overseen by a Competent Person.

1.6. Working at Height

- 1.6.1. Have established and consistently enforced policies and practices for anyone working at height, including appropriate training for all users.
- 1.6.2. Provide appropriate PPE and training in its proper use, including but not limited to OSHA-compliant fall protection and arrest systems for those working at height.
- 1.6.3. Have established and consistently enforced policies prohibiting anyone from working alone at height, either in a rigging or training capacity.
- 1.6.4. Have and rehearse rescue and retrieval plans and scenarios.

2. Policies & Practices

2.1. Documentation and record keeping

- 2.1.1. Rigging equipment inspection log provided and in order. ACE does not mandate the specific contents of this log but it should be designed by a Qualified Person. Example Log 1, Example log 2
- 2.1.2. Apparatus inspection log provided and in order. This information can be included in the rigging equipment log or can be a separate document.
- 2.1.3. All equipment and apparatus inspected and approved by Qualified Person, with ACE Safety Consultant reserving the right to double check inspections.
- 2.1.4. Incident/accident log provided and in order.
- 2.1.5. Comprehensive program in place for the identification and retirement of damaged or worn equipment.

2.2. Safety Practices

- 2.2.1. Teacher to student ratios are established, appropriate and enforced in classes. Examples:
 - -General supervision ratio (aerial) is 1:6. One teacher can safely supervise up to 6 active aerial points at one time.
 - -Specific supervision ratio (aerial, new skills, beginning students) is 1:2. One teacher can safely supervise up to 2 active aerial points at one time.
 - -General supervision (tumbling) is 1:15. One teacher can safely supervise a class of 15 for skills they have already learned.

- -Specific supervision (tumbling) is 1:1. When learning a new skill or drill, students require direct, one on one spotting.
- 2.2.2. A written emergency plan exists and is known to the staff, and anyone overseeing practice opportunities. At a minimum this should cover serious injury and fire procedures.
- 2.2.3. Proof of appropriate liability insurance that covers all relevant activities (minimum policy number is generally \$1 million).
- 2.2.4. Clear delineation between travel areas and working areas, including clear spaces under and around each apparatus.
- 2.2.5. Students working on new skills practice:
 - -at minimum height required for that skill
 - -in the most supported way available.
- 2.2.6. Students and staff observe safe practice distances.
- 2.2.7. All aerial practitioners must have appropriate matting regardless of age or context. e.g. minimum 1 ½" mat for students whose lowest point is 0' 4' in the air, 6"-8" crash mat if student is not actively spotted or is above the spotters shoulders. ACE recognizes that there are times when choreography cannot be completed with recommended matting in place, but these situations should be uniquely determined rather than the norm.
- 2.2.8. If your program allows students or guests to practice outside of classes or private lessons, have a comprehensive set of policies that address the following, as appropriate:
 - 2.2.8.1. Intake and evaluation of users
 - 2.2.8.2. Behavioral and risk agreements with users
 - 2.2.8.3. Appropriate policies addressing supervision
 - 2.2.8.4. Appropriate policies around the teaching or practicing of new skills

3. Curriculum & Staff

3.1. Curriculum

- 3.1.1. Each facility must provide a written curriculum for each discipline taught in the program. The curriculum should come from the coach who heads that discipline. In lieu of a written curriculum, smaller programs may offer a description of the class and the progressions used for it.
- 3.1.2. Classes should provide an appropriate warm-up and review injury prevention techniques when applicable.

3.2. Staff

- 3.2.1. All teachers must have appropriate knowledge of the discipline they teach and must demonstrate a commitment to continuing education.
- 3.2.2. Any personnel overseeing circus arts activities must be First Aid/CPR certified and familiar with the emergency plan.
- 3.2.3. There is a process in place for the hiring/training of new qualified teachers and identifying their qualifications.
- 3.2.4. Teachers must be able to demonstrate methods of evaluating a student's body mechanics, motor skills and behaviors for safe progressions/practices.

Discipline-Specific Guidelines

Each facility needs an inspection schedule for all equipment, utilizing inspection logs and carried out by a competent person, usually the coaches for that discipline.

This list is not complete, as circus arts are constantly evolving. We have endeavored to include all the disciplines that we think require specific safety guidelines.

The guidelines provided for Facilities & Operations, Policies & Practices, and Curriculum & Staff all apply for every discipline; listed below are special considerations for different disciplines that can serve as a guide to improving practices.

If your Circus Arts Facility does not offer classes in a discipline, it is not required to meet the guidelines for that discipline.

Acro-Balancing

- Space used for acro-balancing is clearly and safely delineated
- Appropriate flooring/mats are used based on skill level and class content.
- Proper spotting techniques are taught and practiced
- Spotting belts are employed when appropriate (e.g., three-highs)

Aerial (Trapeze, Fabric, Rope, Lyra, invented static apparatuses.)

- Designed and installed by or under the supervision of a Qualified Person
- Rigging system is inspected on an appropriate schedule by a Competent Person
- All equipment is inspected on an appropriate schedule by a Competent Person
- There is a system in place for identifying and retiring equipment appropriately
- Matting and other safety equipment is available and appropriate for the skills being taught
- Written and rehearsed emergency/rescue plans including risk management analysis and documentation as appropriate.

Chinese Pole/Fitness Pole

- Appropriate mats are available and their use is enforced.
- Skill progressions are defined and enforced. Students are not permitted to advance to dynamic moves until an appropriate proficiency level is attained.
- Poles are properly installed and secured.

Contortion/Extreme Flexibility

- Students and coaches have clearly defined communication tools for assisted stretching.
- Qualified coaches must have either a strong traditional or rhythmic gymnastics background or give evidence of experience, continuing education and qualification.
- An injury log must be kept and maintained, and policies in place to address recurring

- injuries in extreme flexibility. ACE understands that attaining extreme flexibility is a process and that injuries do happen, but injuries (and recurring injuries) should be tracked so that coaches have feedback on how to improve their practice.
- If students are under 18, a clear policy of communication and education between coach, facility staff and parents should be in place.

Fire props

- All teachers must be trained in fire safety
- Fire retardant & fire blanket must be close at hand
- Activities are performed in a clear area with no flammable items
- Training with non-fire props is successfully executed before moving on to fire props
- Appropriate fuel is used
- Written and rehearsed emergency/rescue plans including risk management analysis and documentation as appropriate.

Flying Trapeze

- Designed and installed by or under the supervision of a Qualified Person
- Operated by trained and Competent People (including qualified spotter/line puller), with recurrent training and procedures review
- Incorporates a properly functioning safety line system, with criteria and policies for out-of-lines flying
- Constructed and installed in compliance with appropriate local codes and standards
- Secured against unauthorized use and access when not operating
- Clearly delineated traffic flow with markings to provide appropriate access and security against incursions into operating areas by non-authorized people (such as crossing under net or walking into ground cables)
- Program of regular scheduled (daily/monthly/annual) inspection, maintenance, and retirement of components by Qualified People, including external inspection on at least an annual basis
- Written and rehearsed emergency/rescue plans including risk management analysis and documentation as appropriate.

German Wheel/mono wheel

- wheels secured when not in use
- even floor surface
- frequent checking that screws are tight & bindings are not worn
- suitable footwear is used with new skills
- wheel size is considered when skills are selected for instruction
- German Wheels: not stored with belts on
- German Wheels: clear overhead space

Mini-tramp guidelines

padding on all appropriate trampoline steel

- springs properly maintained e.g. no missing springs
- clear overhead space
- when stacking two crash mats on top of each other make sure that steps are taken to reduce mat slipping and that tumblers are warned before hand that mats may slip due to air between the mats.
- Make sure tumblers land & stop after executing the trick, then step off the mat.
- place one panel mat on each side of the landing / crash mat as stepping or rolling off this mat causes the most injuries.
- if working with an adjustable height mini tramp make sure adjustments are equal on both sides & make sure adjustments are securely tightened.

Rolling Globe

- Skill tests are in place for students to work unspotted
- Safe distances are observed and enforced
- Flooring is appropriate for globe work
- Space is delineated so traffic does not interfere with Globe work
- Globes are set up in a delineated space clear of obstructions

Russian Bar

- Even floor surface
- Bar is checked frequently for wear
- Clear overhead space
- Safety lines are available and used for appropriate skills

Russian Swing

- Appropriate clearance for a body under the resting swing.
- Equipment is frequently checked for wear, loosening of bolts, etc.
- Safety lines are available and used for appropriate skills.
- Clear overhead space/ 3 metres minimum behind swing.
- If using a single safety line it must be measured to insure the swing can go into full back swing. Otherwise risk of pulling participant off in back swing.
- Person holding safety lines should progress with participants or have prior Russian Swing safety line experience. e.g. Beginner line holders with beginner participants.
- Trained spotters should be used for landing as appropriate.
- Mounting area should have grip with no obstructions.
- Written and rehearsed emergency/rescue plans including risk management analysis and documentation as appropriate.

Stilt-Walking

- Stilts are in safe, working condition: no loose bolts, wood is not cracked or split, ties are in good shape, velcro works, rubber tips are not worn through
- Proper safety equipment for elbows, knees, wrists appropriate to the level of the student and stilt height

Proper instruction and spotting is offered

Swinging Trapeze (cloud swing/revolving hoop)

- Apparatus should be at sufficient height above floor or mat surface to accommodate full body length of acrobat(s) at lowest part of swing plus appropriate reaction time/space for line holder to keep acrobat(s) off the ground in case of fall.
- Clear space around apparatus, including at least 3' above the horizontal plane of the crane bar for high swings
- Mats are recommended but not required when spotting lines are fully backed up to the ground; Mats are required when spotting lines are not backed up to the ground.
- All release moves (in which the acrobat becomes completely or almost completely separate from the apparatus during flight) must use a spotting line backed up by a ground anchor or a leash system – including in performance. It is also highly recommended that a spotting line backed up by a ground anchor or leash system be used for all but the most basic skills.
- Regular inspection of rigging and apparatus, including bearing mechanisms. Trapezes
 with cables inside ropes should have the attachment of the cables inspected regularly.
 These cables wear out due to the repetitive bend and unbend motion at the attachment
 point.
- Written and rehearsed emergency/rescue plans including risk management analysis and documentation as appropriate.

Teeter Board/Korean Plank (repeating plank)

- Equipment is frequently checked for wear, loosening of bolts, etc.
- Safety lines are available and used for appropriate skills
- Clear overhead space
- Landing mats are available and used for appropriate skills
- Written and rehearsed emergency/rescue plans including risk management analysis and documentation as appropriate.

Tight Wire

- All sharp edges are covered with tape or padding
- Matting appropriate to the height of the wire is used
- Policies are in place for inspection (of the wire or any props used on the wire), tension setting
- Skill tests are in place for students to work without a spotter
- Safe practice distances are observed and enforced
- Wire is set up in a delineated space clear of obstructions
- Appropriate safety equipment is employed for any students working at height.

Trampoline

• Trampoline is secured when not in use (closed, or w/ mat on top)

- Landing area on each end even with trampoline surface, either by putting it in the ground or installing end decks
- Padding in good working order on all appropriate trampoline steel
- Springs properly maintained, with no missing springs
- Safety lines are available and used for appropriate skills
- Clear overhead and under apparatus space
- For above-ground tramps, surround any edges without decking with spotters of decent size/experience in alert positions (standing feet on floor and eyes on participant)
- Written and rehearsed emergency/rescue plans including risk management analysis and documentation as appropriate.

Tumbling

- Space is clearly and safely delineated to clear traffic for tumbling.
- Appropriate flooring/mats and spotting systems are used based on skill level and class content.

Unicycle

- Helmet, wrist guards, elbow pads, and shin guards, & ankle protection (high top sneakers or tennis shoes & socks) for new riders.
- Pre-ride inspection: make sure the 'L" pedal is on the left, and the 'R' pedal is on the right.
- pre-ride inspection and SUPERVISION of aspiring riders includes checking shoelaces!
- training space is free of sharp corners (such as bleachers), glass windows, trophy
 cases, fire extinguisher boxes; hallways and tennis courts (surrounded by a fence) are
 ideal.