Play Areas/Playgrounds and Transportation
6.1 Play Area/Playground Size and Location

NOTE: The play spaces discussed in the following standards are assumed to be those at the site and thus are the facility’s responsibility. Facilities that do not have on-site play areas but that use playgrounds and equipment in adjacent parks and/or schools may not be able to ensure that children in their facility are playing on equipment or in play space in absolute conformance with the standards presented here.

STANDARD 6.1.0.1: Size and Location of Outdoor Play Area

The facility or home should be equipped with an outdoor play area that directly adjoins the indoor facilities or that can be reached by a route that is free of hazards and is no farther than one-eighth mile from the facility. The playground should comprise a minimum of seventy-five square feet for each child using the playground at any one time.

The following exceptions to the space requirements should apply:

a) A minimum of thirty-three square feet of accessible outdoor play space is required for each infant;

b) A minimum of fifty square feet of accessible outdoor play space is required for each child from eighteen to twenty-four months of age.

There should be separated areas for play for the following ages of children:

a) Ages six through twenty-three months

b) Ages two to five years

c) Ages five to twelve years

*These areas may be further subdivided into ages two to three years and four to five years.

**These areas may be further subdivided into grades K-1, 2-3, and 4-6.

The outdoor playground should include an open space for running that is free of other equipment.

RATIONALE: Play areas must be sufficient to allow freedom of movement without collisions among active children.

Providing more square feet per child may correspond to a decrease in the number of injuries associated with gross motor play equipment. An aggregate size of greater than 4,200 square feet that includes all of a facility’s playgrounds has been associated with significantly greater levels of children’s physical activity.

In addition, meeting proposed Americans with Disabilities Act (ADA) outdoor play area requirements for accessible routes, and developing natural outdoor play yards with variety and shade can only be achieved if sufficient outdoor play space is provided.

The space exceptions are based on early childhood and playground professionals’ experience. This follows the developmental ages used for the development of the Standards for play equipment for children.

COMMENTS: Children benefit from being outside as much as possible and it is important to provide sufficient outdoor space to accommodate the full enrollment of children. If a facility has less than seventy-five square feet of outdoor space per child, then the facility should augment the outdoor space by providing a large indoor play area (see Standard 6.1.0.2).

Additional space beyond the standard of seventy-five square feet per child may be required to meet ADA outdoor play area requirements, depending on the layout and terrain. A Certified Playground Safety Inspector (CPSI) can be utilized for guidance in assisting with outdoor play areas. To locate a CPSI, check the National Park and Recreation Association (NPRA) registry at https://ipv.nrpa.org/CPSI_registry.

Children may play in older children’s areas if the equipment is appropriate for the youngest child present.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:

Standard 3.1.3.1: Active Opportunities for Physical Activity
Standard 3.1.3.2: Playing Outdoors
Standard 3.1.3.4: Caregivers’/teachers’ Encouragement of Physical Activity
Standard 5.1.1.5: Environmental Audit of Site Location
Standard 6.1.0.2: Size and Requirements of Indoor Play Area

REFERENCES:


STANDARD 6.1.0.2: Size and Requirements of Indoor Play Area

If a facility has less than seventy-five square feet of accessible outdoor space per child or provides active play space indoors for other reasons, a large indoor activity room that meets the requirement for seventy-five square feet per child may be used if it meets the following requirements:

a) It provides for types of activities equivalent to those performed in an outdoor play space;

b) The area is ventilated with fresh, temperate air at a minimum of five cubic feet per minute per occupant when open windows are not possible;

c) The surfaces and finishes are shock-absorbing, as required for outdoor installations in Standard 6.2.3.1;
d) The play equipment meets the requirements for outdoor installation as stated in Standards 6.2.1.3-6.2.1.6 and Standards 6.2.2.3-6.2.2.4.

There should be separated areas for play for the following ages of children:
   a) Ages six through twenty-three months
   b) Ages two to five years*
   c) Ages five to twelve years**

*These areas may be further sub-divided into ages two to three years and four to five years.

**These areas may be further sub-divided into grades K-1, 2-3, and 4-6.

Rationale: This standard provides facilities located in inner-city areas or areas with extreme weather with an alternative that allows gross motor play when outdoor spaces are unavailable or unusable. Indoor gross motor play must provide an experience like outdoor play, with safe and healthful environmental conditions that match the benefits of outdoor play as closely as possible. These spaces may be interior if ventilation is adequate to prevent undue concentration of organisms, odors, carbon dioxide, humidity and other substances consistent with ASHRAE's "Standard 62: Ventilation for Acceptable Indoor Air Quality." This follows the developmental ages used for the development of the Standards for play equipment for children (1,2).

Comments: For days in which weather does not permit outdoor play, the facility is encouraged to provide an alternate place for gross motor activities indoors for children of all ages. This space could be a dedicated gross motor room or a gym, a large hallway, or even a classroom in which furniture has been pushed aside. The room should provide adequate space for children to do vigorous activities including running.

Qualified heating and air conditioning contractors should have a meter to measure the rate of airflow. Before indoor areas are used for gross motor activity, a heating and air conditioning contractor should be called in to make airflow measurements.

Type of facility: Center

Related standards:
- Standard 3.1.3.1: Active Opportunities for Physical Activity
- Standard 3.1.3.2: Playing Outdoors
- Standard 3.1.3.4: Caregivers’/teachers’ Encouragement of Physical Activity
- Standards 6.2.1.3-6.2.2.2: Play Equipment
- Standards 6.2.2.3-6.2.2.5: Location and Clearance for Outdoor Play Equipment
- Standard 6.2.3.1: Surfaces for Placing Climbing Equipment

References:

Standard 6.1.0.3: rooftops as play areas

A rooftop used as a play area should be enclosed with a fence from four to six feet high, in accordance with local ordinance, and the bottom edge should be less than three and one-half inches from the base (1). The fence should be designed to prevent children from climbing it. An approved fire escape should lead from the roof to an open space at the ground level that meets the safety standards for outdoor play areas.

Rationale: Rooftop spaces used for play must have safeguards to prevent children from falling off (1).

Comments: Caregivers/teachers should check with local jurisdictions on required fence heights. Jurisdictions vary between four- and six-foot fence heights.

Type of facility: Center; Large Family Child Care Home; Small Family Child Care Home

Related standards:
- Standards 5.1.4.1-5.1.4.7: Exits
- Standard 6.1.0.8: Enclosures for Outdoor Play Areas

References:

Standard 6.1.0.4: Elevated Play Areas

Elevated play areas that have been created using a retaining wall should have a guardrail, protective barrier, or fence running along the top of the retaining wall.

If the exposed side of the retaining wall is higher than two feet, a fence not less than six feet high should be installed. The bottom edge of the fence should be less than three and one-half inches from the base and should be designed to prevent children from climbing it. Fences should be designed so all spaces are less than three and one-half inches (1). If the height of the exposed side of the retaining wall is two feet or lower, a guardrail should be installed if caring for preschool and school-age children. The space between the bottom of the guardrail and the ground should be more than nine inches but less than or equal to twenty-three inches. For school-age children, the space between the bottom of the guardrail and the ground should be more than nine inches but less than or equal to twenty-eight inches. If caring for infants or toddlers, a protective barrier should be installed. The space between the barrier and the ground should be less than three and one-half inches and should be from four to six feet in height.

Rationale: Children falling from elevated play areas may suffer fatal head injuries. All spaces in fences or barriers are recommended to be less than three and one-half inches to prevent head entrapment (1,4) and climbing.

Guardrails are designed to protect against falls from elevated surfaces, but do not discourage climbing or protect against climbing through or under. Protective barriers protect against all three and provide greater protection.
Guardrails are not recommended to use for infant and toddlers; protective barriers should be used instead.

**COMMENTS:** If the exposed side of the retaining wall is less than two feet high, additional safety can be provided by placing shock-absorbing material at the base of the exposed side of the retaining wall. A Certified Playground Safety Inspector (CPSI) can be utilized for guidance in assisting with elevated play areas.

According to the U.S. Consumer Product Safety Commission (CPSC), guardrails are not recommended for use with infants and toddlers because they do not discourage climbing or protect against climbing under or through (1). Protective barriers are recommended for infants and toddlers because they provide better protection and protect against all three risks (1).


**TYPE OF FACILITY:** Center; Large Family Child Care Home; Small Family Child Care Home

**RELATED STANDARDS:**
- Standard 6.1.0.8: Enclosures for Outdoor Play Areas
- Standard 6.2.3.1: Prohibited Surfaces for Placing Climbing Equipment
- Appendix Z: Depth of Surface Materials

**REFERENCES:**

**STANDARD 6.1.0.5: Visibility of Outdoor Play Area**

The outdoor play area should be arranged so all areas are visible to the staff and easily supervised at all times (1). When a group of children are outdoors, the child care staff member responsible for the group should be able to summon another adult without leaving the group alone or unsupervised.

**RATIONALE:** This arrangement promotes the prevention of injury and abuse.

**COMMENTS:** Compliance can be ascertained by inspection. One tool to facilitate communication among caregivers teachers is a walkie-talkie or cell phone.

**TYPE OF FACILITY:** Center; Large Family Child Care Home; Small Family Child Care Home

**REFERENCES:**

**STANDARD 6.1.0.6: Location of Play Areas Near Bodies of Water**

Outside play areas should be free from the following bodies of water:
- a) Unfenced swimming and wading pools;
- b) Ditches;
- c) Quarries;
- d) Canals;
- e) Excavations;
- f) Fish ponds;
- g) Water retention or detention basins;
- h) Other bodies of water.

**RATIONALE:** Drowning is one of the leading causes of unintentional death in children one to fourteen years of age (1).

**TYPE OF FACILITY:** Center; Large Family Child Care Home; Small Family Child Care Home

**REFERENCES:**

**STANDARD 6.1.0.7: Shading of Play Area**

Children should be provided shade in play areas (not just playgrounds). Shading may be provided by trees, buildings, or shade structures. Metal equipment (especially slides) should be placed in the shade (1,2). Sun exposure should be reduced by timing children's outdoor play to take place before ten o'clock in the morning or after four o'clock in the afternoon standard time (3).

**RATIONALE:** The shade will provide comfort and prevent sunburn or burning because the structures or surfacing are hot. Access to sun and shade is beneficial to children while they play outdoors. Light exposure of the skin to sunlight promotes the production of vitamin D that growing children require for bone development and immune system health (8). Additionally, research shows sun may play an important role in alleviating depression. Exposure to sun is needed, but children must be protected from excessive exposure. Individuals who suffer severe childhood sunburns are at increased risk for skin cancer. Practicing sun-safe behavior during childhood is the first step in reducing the chances of getting skin cancer later in life (4). Placing metal equipment (such as slides) in the shade prevents the buildup of heat on play surfaces. Hot play surfaces can cause burns on children (5,7).
COMMENTS: A tent with sides up, awning, or other simple shelter from the sun can be available. Parents/guardians can be encouraged to supply protective clothing and age-appropriate sunscreen with written permission to apply to specified children, as necessary (6).

For more information on appropriate clothing and footwear when playing outdoors, see Standard 9.2.3.1.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 3.1.3.2: Playing Outdoors
Standard 3.4.5.1: Sun Safety Including Sunscreen
Standard 5.1.3.2: Appropriate Temperatures for Outdoor Play
Standard 9.2.3.1: Policies and Practices that Promote Physical Activity

REFERENCES:

STANDARD 6.1.0.8: Enclosures for Outdoor Play Areas

The outdoor play area should be enclosed with a fence or natural barriers. Fences and barriers should not prevent the observation of children by caregivers/teachers. If a fence is used, it should conform to applicable local building codes in height and construction. Fence posts should be outside the fence where allowed by local building codes. These areas should have at least two exits, with at least one being remote from the buildings.

Gates should be equipped with self-closing and positive self-locking closure mechanisms. The latch or securing device should be high enough or of a type such that children cannot open it. The openings in the fence and gates should be no larger than three and one-half inches. The fence and gates should be constructed to discourage climbing. Play areas should be secured against inappropriate use when the facility is closed.

Wooden fences and playground structures created out of wood that is found to contain CCA should be sealed with an oil-based outdoor sealant annually.

RATIONALE: This standard helps to ensure proper supervision and protection, prevention of injuries, and control of the area (3). An effective fence is one that prevents a child from getting over, under, or through it and keeps children from leaving the fenced outdoor play area, except when supervising adults are present. Although fences are not childproof, they provide a layer of protection for children who stray from supervision. Small openings in the fence (no larger than three and one-half inches) prevent entrapment and discouragement climbing (1.2). Fence posts should be on the outside of the fence to prevent injuries from children running into the posts or climbing on horizontal supports (2).

Fences that prevent the child from obtaining a proper toe hold will discourage climbing. Chain link fences allow for climbing when the links are large enough for a foothold. Children are known to scale fences with diamonds or links that are two inches wide. One-inch diamonds are less of a problem.

CCA is a wood preservative and insecticide that is made up of 22% arsenic, a known carcinogen. In 2004, CCA was phased-out for residential uses; however, older, treated wood is still a health concern, particularly for children. For more information on CCA-treated wood products, see Standard 5.2.9.12.

COMMENTS: Picket fences with V spaces at the top of the fencing are a potential entrapment hazard.

Some fence designs have horizontal supports on the side of the fence that is outside the play area which may allow intruders to climb over the fence. Facilities should consider selecting a fence design that prevents the ability to climb on either side of the fence.

For additional information on fencing, consult the ASTM International "Standard F2049-99b: Standard Guide for Fences/Barriers for Public, Commercial, and Multi-family Residential use Outdoor Play Areas" (2).

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 5.2.9.12: Treatment of CCA Pressure-Treated Wood

REFERENCES:
6.2 Play Area/Playground Equipment

6.2.1 General Requirements

STANDARD 6.2.1.1: Play Equipment Requirements

Play equipment and materials in the facility should meet the recommendations of the U.S. Consumer Product Safety Commission (CPSC) and the ASTM International (ASTM) for public playground equipment. Equipment and materials intended for gross-motor (active) play should conform to the recommendations in the CPSC Public Playground Safety Handbook and the provisions in the ASTM "Standard F1487-07a1: Consumer Safety Performance Specifications for Playground Equipment for Public Use."

All play equipment should be constructed, installed, and made available to the intended users in such a manner that meets CPSC guidelines and ASTM standards, as warranted by the manufacturers' recommendations. A Certified Playground Safety Inspector (CPSI) who has been certified by the National Recreation and Park Association (NRPA) should conduct an inspection of playground plans for new installations. Previously installed playgrounds should be inspected at least once each year, by a CPSI or local regulatory agency, and whenever changes are made to the equipment or intended users.

Inspectors should specifically test wooden play equipment structures for chromated copper arsenate (CCA). The wood in many playground sets can contain potentially hazardous levels of arsenic due to the use of CCA as a wood preservative.

Play equipment and materials should be deemed appropriate to the developmental needs, individual interests, abilities, and ages of the children, by a person with at least a bachelor's degree in early childhood education or psychology, or identified as age-appropriate by a manufacturer's label on the product package. Enough play equipment and materials should be available to avoid excessive competition and long waits.

The facility should offer a wide variety of age-appropriate portable play equipment (e.g., balls, jump ropes, hoops, ribbons, scarves, push/pull toys, riding toys, rocking and twisting toys, sand and water play toys) in sufficient quantities that multiple children can play at the same time (1-5).

Children should always be supervised when playing on playground equipment.

RATIONALE: The active play areas of a child care facility are associated with frequent and severe injuries (8). Many technical design and installation safeguards are addressed in the ASTM and CPSC standards. Manufacturers who guarantee that their equipment meets these standards and provide instructions for use to the purchaser ensure that these technical requirements will be met under threat of product liability. Certified Playground Safety Inspectors (CPSI) receive training from the NPRA in association with the National Playground Safety Institute (NPSI). Since the training received by CPSIs exceeds that of most child care personnel, obtaining a professional inspection to detect playground hazards before they cause injury is highly worthwhile.

Playgrounds designed for older children might present intrinsic hazards to preschool-age children. Equipment that is sized for larger and more mature children poses challenges that younger, smaller, and less mature children may not be able to meet.

The health effects related to arsenic include: irritation of the stomach and intestines, birth or developmental effects, cancer, infertility, and miscarriages in women. CCA is a wood preservative and insecticide that is made up of 22% arsenic, a known carcinogen. Much of the wood in playground equipment contains high levels of this toxic substance. In 2004, CCA was phased-out for residential uses; however, older, treated wood is still a health concern, particularly for children (6).

COMMENTS: Compliance should be measured by structured observation.

A general guideline for establishing play equipment heights is one foot per year of age of the intended users. In some states, height limitations for playground equipment are:

a. Thirty-two inches for infants and toddlers (six months to twenty-three months) (7);

b. Forty-eight inches for preschoolers (thirty months to five years of age);

c. Six and one-half feet for school-age children (six through twelve years of age).

Consult with your regulatory health authority for any local or state requirements.

Check the ASTM Website – http://www.astm.org – for up-to-date standards. To obtain the publications listed above, contact the ASTM or the CPSC.

To locate a CPSI, check the NPRA registry at https://ipv.npra.org/CPSI_registry/.

TYPE OF FACILITY: Center, Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 2.2.0.1: Methods of Supervision of Children
Standard 3.3.0.2: Cleaning and Sanitizing Toys
Standard 6.2.3.1: Prohibited Surfaces for Placing Climbing Equipment
Standard 6.2.5.1: Inspection of Indoor and Outdoor Play Areas and Equipment

REFERENCES:

**STANDARD 6.2.1.2: Play Equipment and Surfaces Meet ADA Requirements**

Play equipment and play surfaces should conform to recommendations from the Americans with Disabilities Act (ADA) (1).

**RATIONALE:** Play equipment and play surfaces that are safe and accessible to children with disabilities will encourage all children to play together (2).

**COMMENTS:** For additional information regarding playground equipment and play surfaces accessible to children with disabilities, review the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and the U.S. Access Board's Summary of Accessibility Guidelines for Play Areas at http://www.access-board.gov/play/guide/guide.pdf.

**TYPE OF FACILITY:** Center; Large Family Child Care Home; Small Family Child Care Home

**REFERENCES:**

**STANDARD 6.2.1.3: Design of Play Equipment**

Play equipment should be of safe design and in good repair. Outdoor climbing equipment and swings should be assembled, anchored and maintained in accordance with the manufacturer's instructions. Swings should have soft and flexible seats. Access to play equipment should be limited to age groups for which the equipment is developmentally appropriate.

**RATIONALE:** Having well-designed, age-appropriate play equipment lessens injuries (1-3). Equipment that is sized for larger and more mature children poses challenges that younger, smaller, and less mature children may not be able to meet.

**COMMENTS:** The method of anchoring play equipment should take into consideration ground conditions and seasonal changes in ground condition.

**TYPE OF FACILITY:** Center; Large Family Child Care Home; Small Family Child Care Home

**RELATED STANDARDS:**
Standard 5.2.9.12: Treatment of CCA Pressure-Treated Wood
Standard 6.2.1.1: Play Equipment Requirements

**REFERENCES:**

**STANDARD 6.2.1.4: Installation of Play Equipment**

All pieces of play equipment should be installed as directed by the manufacturer's instructions and specifications of ASTM International/U.S. Consumer Product Safety Commission (ASTM/CPSC) standards. The equipment should be able to withstand the maximum anticipated forces generated by active use that might cause it to overturn, tip, slide, or move in any way.

**RATIONALE:** Secure anchoring is a key factor in stable installation, and because the required footing sizes and depths may vary according to type of equipment, the anchoring process should be completed in strict accordance with the manufacturer's specifications (1,2).

**COMMENTS:** If active play equipment is installed indoors, the same requirements for installation and use apply as in the outdoor setting, including surfacing, spacing, and arrangement. CPSC recommends anchoring for both public and residential playground equipment (1).

**TYPE OF FACILITY:** Center; Large Family Child Care Home; Small Family Child Care Home

**RELATED STANDARDS:**
Standard 6.2.1.5: Play Equipment Connecting and Linking Devices

**REFERENCES:**

**STANDARD 6.2.1.5: Play Equipment Connecting and Linking Devices**

All bolts, hooks, eyes, shackles, rungs, and other connecting and linking devices of all pieces of playground equipment should be designed and secured to prevent loosening
or unfastening, except by authorized individuals with special tools. All connecting and linking devices should be maintained according to the manufacturer’s instructions so not to cause sharp edges, entanglement, or impalement hazards.

RATIONALE: Children may be injured by protruding, incorrectly installed, or malfunctioning devices on play equipment (1).

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 6.2.1.4: Installation of Play Equipment

REFERENCES:

STANDARD 6.2.1.6: Size and Anchoring of Crawl Spaces

Crawl spaces in all pieces of playground equipment, such as pipes or tunnels, should be securely anchored to the ground to prevent movement and should have a diameter of twenty-three inches or greater to permit easy access to the space by adults in an emergency or for maintenance. Crawl tubes should have holes with less than three and one-half inches diameter in them so that adults can supervise the children and see them in the spaces (1).

RATIONALE: Playground equipment components must be secure to prevent sudden falls or collisions by children (1,2). Adequate access space permits adult assistance and first aid measures.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

REFERENCES:

STANDARD 6.2.1.7: Enclosure of Moving Parts on Play Equipment

All pieces of play equipment should be designed so moving parts (swing components, teeter-totter mechanism, spring ride springs, and so forth) will be shielded or enclosed. Teeter-totters should not be used by preschool-age children unless they are equipped with a spring centering device and have an appropriate shock-absorbing material underneath the seats. Use of teeter totters is prohibited for infants and toddlers (1-3).

RATIONALE: Playground injuries often involve pinching, catching, or crushing of body parts or clothing by equipment mechanisms (4).


TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

REFERENCES:

STANDARD 6.2.1.8: Material Defects and Edges on Play Equipment

All pieces of play equipment should be free of sharp edges, protruding parts, weaknesses, and flaws in material construction. Sharp edges in wood, metal, or concrete should be rounded on all edges. All corners and edges on rigid materials should have a minimum radius of one-quarter inch unless the material thickness is less than one-half inch, in which case the radius should be half the thickness of the material. This requirement does not apply to swing seats, straps, ropes, chains, connectors, and other flexible components. Wood materials should be free of chromated copper arsenite (CCA), sanded smooth, and should be inspected regularly for splintering.

RATIONALE: Any sharp or protruding surface presents a potential for lacerations and contusions to the child’s body (1-4).

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 5.2.9.12: Treatment of CCA Pressure-Treated Wood

REFERENCES:
Caring for Our Children: National Health and Safety Performance Standards


STANDARD 6.2.1.9: Entrapment Hazards of Play Equipment

All openings in pieces of play equipment should be designed too large for a child’s head to get stuck in or too small for a child’s body to fit into, in order to prevent entrapment and strangulation. Openings in exercise rings (overhead hanging rings such as those used in a ring trek or ring ladder) should be smaller than three and one-half inches or larger than nine inches in diameter. Rings on long chains are prohibited. A play structure should have no openings with a dimension between three and one-half inches and nine inches. In particular, side railings, stairs, and other locations where a child might slip or try to climb through should be checked for appropriate dimensions.

Protrusions such as pipes, wood ends, or long bolts that may catch a child’s clothing are prohibited. Distances between two vertical objects that are positioned near each other should be less than three and one-half inches to prevent entrapment of a child’s head. No opening should have a vertical angle of less than fifty-five degrees. To prevent entrapment of fingers, openings should not be larger than three-eighths inch or smaller than one inch. A Certified Playground Safety Inspector (CPSI) is specially trained to find and measure various play equipment hazards.

RATIONALE: Any equipment opening between three and one-half inches and nine inches in diameter presents the potential for head entrapment. Similarly, openings between three-eighths inch and one inch can cause entrapment of the child’s fingers (1-2).

COMMENTS: To locate a CPSI, check the National Park and Recreation Association (NPRA) registry at https://ipv.npaa.org/CPSEL_register/.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

REFERENCES:

6.2.2 Use Zones and Clearance Requirements

STANDARD 6.2.2.1: Use Zone for Fixed Play Equipment

All fixed play equipment should have a minimum of six feet use zone (clearance space) from walkways, buildings, and other structures that are not used as part of play activities (1,3). For fixed play equipment only used by children six months to twenty-three months, a minimum three-foot use zone is required (2).

RATIONALE: Injuries from falls are more likely to occur when equipment spacing is inadequate (1).

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 6.2.2.2: Arrangement of Play Equipment
Standard 6.2.2.4: Clearance Requirements of Playground Areas
Appendix HH: Use Zones and Clearance Dimensions for Single- and Multi-Axis

REFERENCES:

STANDARD 6.2.2.2: Arrangement of Play Equipment

All equipment should be arranged so that children playing on one piece of equipment will not interfere with children playing on or running to another piece of equipment. All equipment should be arranged to facilitate proper supervision by sight and sound.

RATIONALE: Collisions between children utilizing different pieces of equipment more often occur when equipment is improperly placed (1).

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 6.1.0.1: Size and Location of Outdoor Play Area
Standard 6.2.2.1: Use Zone for Fixed Play Equipment
Standard 6.2.2.3: Location of Moving Play Equipment
Standard 6.2.2.4: Clearance Requirements of Playground Areas
Appendix HH: Use Zones and Clearance Dimensions for Single- and Multi-Axis

REFERENCES:

STANDARD 6.2.2.3: Location of Moving Play Equipment

Moving play equipment, such as swings and merry-go-rounds, should be located toward the edge or corner of a play area, or should be placed in such a way as to discourage children from running into the path of the moving equipment (see Appendix HH, Use Zones and Clearance Dimensions for Single- and Multi-Axis Swings).
Caring for Our Children: National Health and Safety Performance Standards

RATIONALE: Placing moving equipment around the perimeter of the play area will reduce the number of traffic paths around this equipment (1).

TYPE OF FACILITY: Center, Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 6.2.2.1: Use Zone for Fixed Play Equipment
Standard 6.2.2.2: Arrangement of Play Equipment
Standard 6.2.2.4: Clearance Requirements of Playground Areas
Appendix HH: Use Zones and Clearance Dimensions for Single- and Multi-Axis Swings

REFERENCES:

STANDARD 6.2.2.4: Clearance Requirements of Playground Areas


Equipment should be situated so that clearance space, called use zones, allocated to one piece of equipment does not encroach on that of another piece of equipment.

RATIONALE: Ample space to enable movement around and use of equipment also helps to restrict the number of pieces of equipment within the play area, thus preventing overcrowding and reducing the potential for injury (1-3).

TYPE OF FACILITY: Center, Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 6.2.2.1: Use Zone for Fixed Play Equipment
Standard 6.2.2.3: Location of Moving Play Equipment
Appendix HH: Use Zones and Clearance Dimensions for Single- and Multi-Axis Swings

REFERENCES:

6.2.3 Play Area and Playground Surfacing

STANDARD 6.2.3.1: Prohibited Surfaces for Placing Climbing Equipment

Equipment used for climbing should not be placed over, or immediately next to, hard surfaces such as asphalt, concrete, dirt, grass, or flooring covered by carpet or gym mats not intended for use as surfacing for climbing equipment.

All pieces of playground equipment should be placed over and surrounded by a shock-absorbing surface. This material may be either the unitary or the loose-fill type, as defined by the U.S. Consumer Product Safety Commission (CPSC) guidelines and ASTM International (ASTM) standards, extending at least six feet beyond the perimeter of the stationary equipment (1,2). These shock-absorbing surfaces must conform to the standard stating that the impact of falling from the height of the structure will be less than or equal to peak deceleration of 20G and a Head Injury Criterion (HIC) of 1000 and should be maintained at all times (3). Organic materials that support colonization of molds and bacteria
should not be used. All loose fill materials must be raked to retain their proper distribution, shock-absorbing properties and to remove foreign material. This standard applies whether the equipment is installed outdoors or indoors.

**RATIONALE:** Head-impact injuries present a significant danger to children. Falls into a shock-absorbing surface are less likely to cause serious injury because the surface is yielding, so peak deceleration and force are reduced (1). The critical issue of surfaces, both under equipment and in general, should receive the most careful attention (1).

**COMMENTS:** Children should not dig in sand used under swings. It is not safe and the sand could be contaminated. If sand is provided in a play area for the purpose of digging, it should be in a covered box. Sand used as surfacing does not need to be covered. Staff should realize that sand used as surfacing may be used as a litter box for animals. Also, sand compacts and becomes less shock-absorbing when wet and it can become very hard when temperatures drop below freezing. Two scales are used for measuring the potential severity of falls. One is known as the G-max, and the other is known as the HIC. G-max measures the peak force at the time of impact; HIC measures total force during impact. Levels of 200 G-max or 1000 HIC have been accepted as thresholds for risk of life-threatening injuries. G-max and HIC levels of playground surfaces can be tested in various ways. The easiest one to use is the instrumented hemispherical triaxial headform. The individual conducting the test should use a process that conforms to the ASTM standard "F1292-09: Standard Specification for Impact Attenuation of Surfacing Materials within the Use Zone of Playground Equipment" (2).

For guidelines on play equipment and surfacing, contact the CPSC or a Certified Playground Safety Inspector (CPSI).

**TYPE OF FACILITY:** Center; Large Family Child Care Home; Small Family Child Care Home

**RELATED STANDARDS:**
Standard 6.2.4.1: Sandboxes
Appendix Z: Depth of Surfacing Materials

**REFERENCES:**

### 6.2.4 Specific Play Equipment

**STANDARD 6.2.4.1: Sandboxes**

The facility should adhere to the following requirements for sand play areas:

- Sandboxes should be constructed to permit drainage;
- Sandboxes should be covered with a lid or other covering when they are not in use;
- Sandboxes should be kept free from cat and other animal excrement;
- Sandboxes should be regularly cleaned of foreign matter;
- Sandboxes should be located away from prevailing winds, if this is not possible, windbreaks using bushes, trees, or fences should be provided;
- Sand used in the box should be washed, free of organic, toxic, or harmful materials, and fine enough to be shaped easily;
- Sand should be replaced as often as necessary to keep the sand visibly clean and free of extraneous materials;
- Sand play areas should be distinct from landing areas for slides or other equipment;
- Sand play area covers should be adequately secured when they are lifted or moved to allow children to play in the sandbox.

**RATIONALE:** Wet sand can be a breeding ground for insects and can promote mold and bacterial growth (2).

Uncovered sand is subject to contamination and transmission of disease from animal feces (such as toxoplasmosis from cat feces) and insects breeding in sandboxes (1). Replacement of sand may be required to keep it free of foreign material that could cause injury.

There is potential for used sand to contain toxic or harmful ingredients such as tremolite, an asbestos-like substance. Sand that is used as a building material or is harvested from a site containing toxic substances may contain potentially harmful substances. Sand can come from many sources. Caregivers/teachers should be sure they are using sand labeled as a safe play material or sand that is specifically prepared for sandbox use.

**COMMENTS:** Sand already installed in play areas cannot be safely cleaned without leaving residues that could harm children.

**TYPE OF FACILITY:** Center; Large Family Child Care Home; Small Family Child Care Home

**RELATED STANDARDS:**
Standard 3.3.0.2: Cleaning and Sanitizing Toys
Standard 5.2.8.1: Integrated Pest Management
Standard 5.2.8.2: Insect Breeding Hazard

**REFERENCES:**
STANDARD 6.2.4.2: Water Play Tables

Communal, unsupervised water play tables should be prohibited. Communal water tables should be permitted if children are supervised and the following conditions apply:

a) The water tables should be filled with fresh potable water immediately before designated children begin a water play activity at the table, and changed when a new group begins a water play activity at the table even if all the child-users are from a single group in the space where the water table is located; or, the table should be supplied with freely flowing fresh potable water during the play activity;

b) The basin and toys should be washed and sanitized at the end of the day;

c) If the basin and toys are used by another classroom, the basin and toys should be washed and sanitized prior to use;

d) Only children without cuts, scratches, and sores on their hands should be permitted to use a communal water play table;

e) Children should wash their hands before and after they use a communal water play table;

f) Caregivers/teachers should ensure that no child drinks water from the water table;

g) Floor/surface under and around the water table should be dried during and after play;

h) Avoid use of bottles, cups, and glasses in water play, as these items encourage children to drink from them.

As an alternative to a communal water table, separate basins with fresh potable water for each child to engage in water play should be permitted. If separate basins of water are used and placed on the floor, close supervision is crucial to prevent drowning.

RATIONALE: Contamination of hands, toys, and equipment in the room in which play tables are located seems to play a role in the transmission of diseases in child care settings (1,2). Proper handwashing, supervision of children, and cleaning and sanitizing of the water table will help prevent the transmission of disease (3).

Children have drowned in very shallow water (4).

COMMENTS: A designated group of children is defined as the children in a classroom in a center or the children in a family child care setting.

To avoid splashing chemical solutions around the child care environment, the addition of bleach to the water is not recommended.

Keeping the floor/surface dry with towels and/or wiping up water on the floor during and after play is recommended to reduce the potential for children and staff slipping/falling.

Another way to use water play tables is to use the table to hold a personal basin of potable water for each child who is engaged in water play. With this approach, supervision must be provided to be sure children confine their play to their own basin. Wherever a suitable inlet and outlet of water can be arranged, safe communal water play can involve free-flowing potable water by attaching a hose to the table that connects to the water source and attaching a hose to the table’s drain that connects to a water drain or suitable run-off area.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:

- Standard 3.2.2.1: Situations that Require Hand Hygiene
- Standard 3.3.0.2: Cleaning and Sanitizing Toys
- Standard 6.3.5.2: Water in Containers

REFERENCES:


STANDARD 6.2.4.3: Sensory Table Materials

All materials used in a sensory table should be nontoxic and should not be of a size or material that could cause choking. Sensory table activities should not be used with children under eighteen months of age. For toddlers, materials should be limited to water, sand and fixed plastic objects. All sensory table activities should be supervised for toddlers and preschool children. When water is used in a sensory table, the requirements of Standard 6.2.4.2, Water Play Tables should be met.

RATIONALE: According to the federal government’s small parts standard on safe-size toys for children under three years of age, a prohibited small part is any object that fits completely into a specially designed test cylinder two and one-quarter inches long by one and one-quarter inches wide, which approximates the size of the fully expanded throat of a child under three-years-old. Since round objects are more likely to choke children because they can completely block a child’s airway, balls and toys with parts that are sphericoid, ovoid, or elliptical with a diameter smaller than one and three-quarter inches should be banned for children under three years old (4,5); any part smaller than this is a potential choking hazard (5). Injury and fatality from aspiration of small parts is well-documented (4). Eliminating small parts from children’s environment will greatly reduce this risk.

According to the U.S. Food and Drug Administration (FDA), eating as few as four or five uncooked kidney beans can cause severe nausea, vomiting, and diarrhea. In addition to their toxicity, raw kidney beans are small objects that could be inserted by a child into his nose or ear; beans can potentially get stuck, swell, and be difficult to remove (1). Styrofoam peanuts could cause choking. Flour could be
aspirated and affect breathing; if spilled on the floor, flour could cause slipping. If soil is used, it must be free from chemicals such as fertilizer or pesticides.

Sensory table activities/materials are not developmentally appropriate for children under the age of eighteen months; the potential health and safety hazards outweigh the benefits for use with this age group. Supervision is required for toddlers and preschool-age children to ensure that they are using materials appropriately (2,3).

Sand used in sensory tables should be new "sterilized" natural sand that is labeled for use in children's sandboxes or labeled as play sand. Water used in sensory tables must be potable and clean.

COMMENTS: Children's hands should be washed before and after using the sensory table. Children with open areas (cuts/sores) should not be allowed to use the sensory table.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 3.2.2.1: Situations that Require Hand Hygiene
Standard 3.3.0.2: Cleaning and Sanitizing Toys
Standard 6.2.4.1: Sandboxes
Standard 6.2.4.2: Water Play Tables
Standard 6.4.1.2: Inaccessibility of Toys or Objects to Children
Under Three Years of Age

REFERENCES:

STANDARD 6.2.4.4: Trampolines

Trampolines, both full and mini-size, should be prohibited from being used as part of the child care program activities both on-site and during field trips.

RATIONALE: Both the American Academy of Pediatrics (AAP) and American Academy of Orthopedic Surgeons (AAOS) Policy Statements recommend the prohibition of trampolines for children younger than six years of age (1,2). The U.S. Consumer Product Safety Commission (CPSC) also supports this position (3). The numbers of injuries incurred on trampolines is large and growing (4-8). Even if one accepts that the rates of injury are uncertain due to increasing sales as well as injuries, the severity of injury incurred (number of injuries requiring admission for surgery, small but documented number of deaths) all have supported those recommendations. Given the risk reflected in the recommendations of national health and safety groups, there are documented cases where insurance companies have refused to issue or to continue insurance to the home or child care center in which a trampoline was found.

COMMENTS: The AAP recommends: "Despite all currently available measures to prevent injury, the potential for serious injury while using a trampoline remains. The need for supervision and trained personnel at all times makes home use extremely unwise" (1). The trampoline should not be used at home, inside or outside. During anticipatory guidance, health care professionals should advise parents/guardians never to purchase a home trampoline or allow children to use home trampolines (2). The trampoline should not be part of routine physical education classes in schools (3). The trampoline has no place in outdoor playgrounds and should never be regarded as play equipment (1).

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

REFERENCES:

STANDARD 6.2.4.5: Ball Pits

Children should be prohibited from playing in ball pits.

RATIONALE: Ball pits are hard to sanitize and disinfect (1). Supervision is difficult to monitor. Children can bury themselves making it possible for others to jump on them and cause injury (2).

COMMENTS: Although not common in child care facilities, caregivers/teachers should take caution in not allowing play in ball pits when using public play areas.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

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REFERENCES:
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2. Fiochi, A., P. Restani, C. Ballabio, G. R. Bouygue, A. Serra, M.
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as a contaminant of plastic balls in play pits. *J Allergy Clin Immunol*

6.2.5 Inspection of Play Areas/Playgrounds and Equipment

STANDARD 6.2.5.1: Inspection of Indoor and Outdoor Play Areas and Equipment

The indoor and outdoor play areas and equipment should be inspected daily for the following:

a) Missing or broken parts;
b) Protrusion of nuts and bolts;
c) Rust and chipping or peeling paint;
d) Sharp edges, splinters, and rough surfaces;
e) Stability of handholds;
f) Visible cracks;
g) Stability of non-anchored large play equipment (e.g.,
playhouses);
h) Wear and deterioration.

Observations should be documented and filed, and the problems corrected.

Facilities should conduct a monthly inspection as outlined in Appendix EE, America's Playgrounds Safety Report Card.

RATIONALE: Regular outdoor inspections are critical to prevent deterioration of equipment and accumulation of hazardous materials within the play site, and to ensure that appropriate repairs are made as soon as possible (1,2).

Pools of water may cause children to slip and fall.

A monthly safety check of all the equipment within the facility as a focused task provides an opportunity to notice wear and tear that requires maintenance.

COMMENTS: Regularity of inspections can be assured by assigning a staff member to check all play equipment to make certain that it is safe for children. Observations should be made while the children are playing, too, to spot any maintenance problems and correct them as soon as possible.

If an off-site play area is used, a safety check for hazardous materials within the play area should be done upon arrival to the off-site playground. Hazardous materials may have been left in the play area by other people before the arrival of children from the child care facility.

If the playground is not safe, then alternate gross motor activities should be offered rather than allowing children to use equipment that is not safe for them because of hazards.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 5.2.8.1: Integrated Pest Management

Standard 6.2.3.1: Prohibited Surfaces for Placing Climbing Equipment

Standard 9.2.6.1: Policy on Use and Maintenance of Play Areas

Standards 9.2.6.2-9.2.6.3: Reports/Records of Play Area and Equipment

Appendix EE: America's Playgrounds Safety Report Card

REFERENCES:
cpsc.gov/cpscpub/pubs/325.pdf.

STANDARD 6.2.5.2: Inspection of Play Area Surfacing

Loose-fill surfacing materials used to provide impact absorption beneath play equipment should be checked frequently to ensure surfacing is of sufficient depth and has not shifted or displaced significantly, especially in areas under swings and slide exits. Missing or displaced loose-fill surfacing should be raked back into proper place or replaced so that a constant depth is maintained throughout the playground.

All loose-fill surfacing material, particularly sand, should be inspected daily for:

a) Debris (such as glass);
b) Animal excrement, and other foreign material;
c) Depth and compaction of surface;
d) Standing water, ice, or snow.

Loose fill surfaces should be hosed down for cleaning and raked or sifted to remove hazardous debris as often as needed to keep the surface free of dangerous, unsanitary materials. Surfacing should be raked to fill in areas of wear (e.g., under swings, bottom of slides, etc.) on a daily basis before use.

Check for packing as a result of rain or ice, and if found to be compressed, material should be turned over or raked up to increase resilience capacity. Play should not be permitted on structures in the area if a packed surface cannot be raked up or turned over.

RATIONALE: The number one cause of injury on playgrounds is falls to the surface. Maintaining the correct depth of loose-fill material is crucial for safety. Surfaces should be shock-absorbing (1-3). Cold temperatures may cause "packing," which causes the surface material to lose shock-absorbing capacity. Other materials, such as glass, debris, and animal excrement, present potential sources of injury or infection. Maintaining loose fill surfaces provides for proper sanitation.

COMMENTS: Surfacing is not tested with ice or snow on it and thus its shock-absorbing and injury-preventing ability is unrated. Therefore, surfacing with ice or snow cannot be relied upon to absorb falls and prevent injuries. Sand is not an appropriate playground covering in areas where pets or animals are a problem. Contact a Certified Playground Safety Inspector (CPSI) for further guidance. To locate a
6.3 Water Play Areas (Pools, Etc.)

6.3.1 Access to and Safety Around Bodies of Water

STANDARD 6.3.1.1: Enclosure of Bodies of Water

All water hazards, such as pools, swimming pools, stationary wading pools, ditches, fish ponds, and water retention or detention basins should be enclosed with a fence that is four to six feet high or higher and comes within three and one-half inches of the ground. Openings in the fence should be no greater than three and one-half inches. The fence should be constructed to discourage climbing and kept in good repair.

If the fence is made of horizontal and vertical members (like a typical wooden fence) and the distance between the tops of the horizontal parts of the fence is less than forty-five inches, the horizontal parts should be on the swimming pool side of the fence. The spacing of the vertical members should not exceed one and three-quarters inches.

For a chain link fence, the mesh size should not exceed one and one-quarter square inches.

Exit and entrance points should have self-closing, positive latching gates with locking devices a minimum of fifty-five inches from the ground.

A wall of the child care facility should not constitute one side of the fence unless the wall has no openings capable of providing direct access to the pool (such as doors, windows, or other openings).

If the facility has a water play area, the following requirements should be met:

a) Water play areas should conform to all state and local health regulations;

b) Water play areas should not include hidden or enclosed spaces;

c) Spray areas and water-collecting areas should have a non-slip surface, such as asphalt;

d) Water play areas, particularly those that have standing water, should not have sudden changes in depth of water;

e) Drains, streams, water spouts, and hydrants should not create strong suction effects or water-jet forces;

f) All toys and other equipment used in and around the water play area should be made of sturdy plastic or metal (no glass should be permitted);

g) Water play areas in which standing water is maintained for more than twenty-four hours should be treated according to Standard 6.3.4.1, and inspected for glass, trash, animal excrement, and other foreign material.

RATIONALE: Most drownings happen in fresh water, often in home swimming pools (1). Most children drown within a few feet of safety and in the presence of a supervising adult (1). Small fence openings (three and one-half inches or smaller) prevent children from passing through the fence (4). All areas must be visible to allow adequate supervision.

An effective fence is one that prevents a child from getting over, under, or through it and keeps the child from gaining access to the pool or body of water except when supervising adults are present. Fences are not childproof, but they provide a layer of protection for a child who strays from supervision.

Fence heights are a matter of local ordinance but it is recommended that it should be at least five feet. A house exterior wall can constitute one side of a fence if the wall has no openings providing direct access to the pool.

With fences made up of horizontal and vertical members, children should not be allowed to use the horizontal members as a form of ladder to climb into a swimming pool area. If the distance between horizontal members is less than forty-five inches, placing the horizontal members on the pool side of the fence will prevent children using this to climb over and into the pool area. However, if the horizontal members are greater than forty-five inches apart, it is more difficult for a child to climb and therefore the horizontal members could be placed on the side of the fence facing away from the pool (2).

COMMENTS: See the American National Standards Institute (ANSI) and ASTM International standards for pool safety (2,3).

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 6.2.5.1: Inspection of Indoor and Outdoor Play Areas and Equipment
Standard 6.2.5.2: Inspection of Play Area Surfacing
Standard 6.3.1.2: Accessibility to Above-Ground Pools

REFERENCES:

**STANDARD 6.3.1.2: Accessibility to Above-Ground Pools**

Above-ground pools should have non-climbable sidewalks that are at least four feet high or should be enclosed with an approved fence, as specified in Standard 6.3.1.1 (1,2). When the pool is not in use, steps should be removed from the pool or otherwise protected to ensure that they cannot be accessed.

**RATIONALE:** The U. S. Consumer Product Safety Commission (CPSC) has estimated that each year about 800 children under five-years-old drown in swimming pools (3).

**COMMENTS:** CPSC has published an illustrated guideline (Safety barrier guidelines for home pools) to explain barriers around and access to home swimming pools (3). The document is available online at http://www.cpsc.gov/cpscppub/pubs/pool.pdf.

**TYPE OF FACILITY:** Center; Large Family Child Care Home; Small Family Child Care Home

**RELATED STANDARDS:**
Standard 6.3.1.1: Enclosure of Bodies of Water

**REFERENCES:**

**STANDARD 6.3.1.3: Sensors or Remote Monitors**

Sensors or remote monitors should not be used in lieu of a fence or proper supervision (1).

**RATIONALE:** A temporary power outage negates the protection of sensors. Response to an emergency is delayed if a remote monitor is used to replace direct supervision.

**TYPE OF FACILITY:** Center; Large Family Child Care Home; Small Family Child Care Home

**RELATED STANDARDS:**
Standard 1.1.1.5: Ratios and Supervision for Swimming, Wading, and Water Play

**REFERENCES:**

**STANDARD 6.3.1.4: Safety Covers for Swimming Pools**

When not in use, in-ground and above-ground swimming pools should be covered with a safety cover that meets or exceeds the ASTM International (ASTM) standard "F1346-03: Standard performance specification for safety covers and labeling requirements for all covers for swimming pools, spas, and hot tubs" (2).

**RATIONALE:** Fatal injuries have occurred when water has collected on top of a secured pool cover. The depression caused by the water, coupled with the smoothness of the cover material, has proved to be a deadly trap for some children (1). The ASTM standard now defines a safety cover "as a barrier (intended to be completely removed before water use) for swimming pools, spas, hot tubs, or wading pools, attendant appurtenances and/or anchoring mechanisms which reduces--when properly labeled, installed, used and maintained in accordance with the manufacturer's published instructions--the risk of drowning of children under five years of age, by inhibiting their access to the contained body of water, and by providing for the removal of any substantially hazardous level of collected surface water" (2).

Safety covers reduce the possibility of contamination by animals, birds, and insects.

**COMMENTS:** Facilities should check whether the manufacturers warrant their pool covers as meeting ASTM standards. See ASTM standard "F1346-03." Some jurisdictions require four-sided fencing around swimming pools; the facility should follow the requirements of their jurisdiction. Best practice is four-sided fencing.

**TYPE OF FACILITY:** Center; Large Family Child Care Home; Small Family Child Care Home

**RELATED STANDARDS:**
Standard 6.3.1.1: Enclosure of Bodies of Water

**REFERENCES:**

**STANDARD 6.3.1.5: Deck Surface**

A swimming pool should be surrounded by at least a four-foot wide, nonskid surface in good repair, free of tears or breaks (1).

**RATIONALE:** This standard is to prevent slipping and injury of children and adults and to allow supervising caregivers/teachers to walk around all sides of the pool.

**TYPE OF FACILITY:** Center; Large Family Child Care Home; Small Family Child Care Home

**RELATED STANDARDS:**
Standard 6.4.1.1: Pool Toys
REFERENCES:

STANDARD 6.3.1.8: Pool Drain Covers

All covers for the main drain and other suction ports of swimming and wading pools should be listed by a nationally recognized testing laboratory in accordance with ASME/ANSI standard "A112.19.8: Standard for Suction Fittings for Use in Swimming Pools, Wading Pools, Spas and Hot Tubs," and should be used under conditions that do not exceed the approved maximum flow rate, be securely anchored using manufacturer-supplied parts installed per manufacturer's specifications, be in good repair, and be replaced at intervals specified by manufacturer. Facilities with one outlet per pump, or multiple outlets per pump with less than thirty-six inches center-to-center distance for two outlets, must be equipped with a Safety Vacuum Release System (SVRS) meeting the ASME/ANSI standard "A112.19.17: Manufactured Safety Vacuum Release Systems for Residential and Commercial Swimming Pool, Spas, Hot Tub and Wading Pool Suction Systems" or ASTM International (ASTM) standard "F2387-04: Standard Specification for Manufactured SVRS for Swimming Pools, Spas, and Hot Tubs" standards, as required by the Virginia Graeme Baker Pool and Spa Safety Act, Section 1404(c)(1A)(l) (1)(2).

RATIONALE: In some instances, children have drowned as a result of their body or hair being entrapped or seriously injured by sitting on drain grates (3). Drain covers mitigate the five types of entrapment: hair, body, limb, evisceration, and mechanical (jewelry). Use of flat- or flush-mount covers/gra tes is prohibited. Use of drain covers under conditions that exceed the maximum flow rate can pose a hazard for entrapment. When drain covers are broken or missing, the body can be entrapped. When a child is playing with an open drain (one with the cover missing), a child can be entrapped by inserting a hand or foot into the pipe and being trapped by the resulting suction. Hair entrapment typically involves females with long, fine hair who are underwater with the head near the suction inlet; they become entrapped when their hair sweeps in and around the cover, and not because of the strong suction forces. Use of a SVRS will not mitigate hair, limb, and mechanical entrapment.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

REFERENCES:

STANDARD 6.3.1.7: Pool Safety Rules

Legible safety rules for the use of swimming and built-in wading pools should be posted in a conspicuous location, and each caregiver/teacher responsible for the supervision of children should read and review them often enough so he is able to cite the rules when asked. The facility should develop and review an emergency plan, as specified in Written Plan and Training for Handling Urgent Medical Care or Threatening Incidents, Standard 9.2.4.1.

RATIONALE: This standard is based on state and local regulations and ASTM International (ASTM) standard "F2518-06: Standard Guide for Use of a Residential Swimming Pool, Spa, and Hot Tub Safety" (1).

COMMENTS: Compliance can be assessed by interviewing caregivers/teachers to determine if they know the rules and by observing if the rules are followed.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 1.1.1.5: Ratios and Supervision for Swimming, Wading, and Water Play
Standards 2.2.0.4-2.2.0.5: Water Safety
Standard 9.2.4.1: Written Plan and Training for Handling Urgent Medical Care or Threatening Incidents

REFERENCES:

STANDARD 6.3.1.8: Supervision of Pool Pump

The adult in the pool should be aware of the location of the pump shut-off switch and be able to turn it off in case a child is caught in the drain. Unobstructed access should be provided to an electrical switch that controls the pump. This adult should also have immediate access to a working telephone located at the pool.

RATIONALE: The power of suction of a pool drain often requires that the pump be turned off before a child can be removed. The adult supervisor needs immediate access to the pump shut-off switch (1,2).

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 1.1.1.5: Ratios and Supervision for Swimming, Wading, and Water Play
Standard 6.3.1.6: Pool Drain Covers

REFERENCES:
6.3.2 Pool Equipment

STANDARD 6.3.2.1: Lifesaving Equipment

Each swimming pool more than six feet in width, length, or diameter should be provided with a ring buoy and rope, a rescue tube, or a throwing line and a shepherd's hook that will not conduct electricity. This equipment should be long enough to reach the center of the pool from the edge of the pool, should be kept in good repair, and should be stored safely and conveniently for immediate access. Caregivers/teachers should be trained on the proper use of this equipment so that in emergencies, caregivers/teachers will use equipment appropriately. Children should be familiarized with the use of the equipment based on their developmental level.

RATIONALE: Drowning accounts for the highest rate of unintentional injury-related death in children one to four years of age; this lifesaving equipment is essential (1).

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS: Standard 1.4.3.3: CPR Training for Swimming and Water Play

REFERENCES:

STANDARD 6.3.2.2: Lifeline in Pool

A lifeline (rope and float line) should be provided at the five-foot break in grade between the shallow and deep portions of the swimming pool.

RATIONALE: For children's safety, the five-foot depth boundary should be known to caregivers/teachers assisting children in the pool (1).

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS: Standard 6.3.2.1: Lifesaving Equipment

REFERENCES:

STANDARD 6.3.2.3: Pool Equipment and Chemical Storage Rooms

Pool equipment and chemical storage rooms should be locked, ventilated, and used only for pool equipment and pool chemicals.

RATIONALE: Pool chemicals are kept in concentrated forms that are hazardous to children. Access to these hazards must be carefully controlled (1).

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

REFERENCES:
Caring for Our Children: National Health and Safety Performance Standards


STANDARD 6.3.3.3: Electrical Safety for Pool Areas
Electrical equipment should be installed and inspected at and around the pool at intervals as required by the regulatory electrical inspector.

No electrical wires or electrical equipment should be located over or within ten feet of the pool area, except as permitted by the National Electrical Code.

RATIONALE: Safety equipment and proper location of electrical equipment prevents electrical hazards that could be life-threatening (1,2). Electrical wires and equipment can produce electrical shock or electrocution.

COMMENTS: For electrical safety, a ground-fault circuit-interrupter is mandatory. The National Electrical Code (NEC) code prohibits electrical installations closer than five feet from water and requires GFCI protection for all electrical equipment, including 240-volt equipment located five to ten feet from the water and for receptacles within a twenty-foot perimeter (1,2).

The National Electrical Code is available from the Institute of Electrical and Electronics Engineers (IEEE).

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 5.2.4.3: Ground-Fault Circuit-Interrupter for Outlets Near Water

REFERENCES:

STANDARD 6.3.3.4: Pool Water Temperature
Water temperatures should be maintained at no less than 82°F and no more than 88°F while the pool is in use.

RATIONALE: Because of their relatively larger surface area to body mass, young children can lose or gain body heat more easily than adults. Water temperature for swimming and wading should be warm enough to prevent excess loss of body heat and cool enough to prevent overheating.

COMMENTS: Learner pools in public swimming centers are usually at least two degrees warmer than the main pool. Caregivers/teachers should be advised about the length of time infants should usually spend in the water and how to recognize when an infant is cold so that temperature control should not be a problem (1). Signs that an infant is cold are

that the infant has cold skin, becomes unhappy, has low energy or becomes less responsive.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

REFERENCES:

6.3.4 Water Quality of Pools

STANDARD 6.3.4.1: Pool Water Quality
Water in swimming pools and built-in wading pools that children use should be maintained between pH 7.2 and pH 7.8. The water should be disinfected by available free chlorine between 1.0 ppm and 3.0 ppm, or bromine between 1.0 ppm and 6.0 ppm, or an equivalent agent approved by the health department. The pool should be cleaned, and the chlorine or equivalent disinfectant level and pH level should be tested every two hours during periods of use.

Equipment should be available to test for and maintain a measurable residual disinfectant content in the water and to check the pH of the water. Water should be sampled and a bacteriological analysis conducted to determine absence of fecal coliforms (e.g., Escherichia coli, Pseudomonas aeruginosa, and Giardia intestinalis) at least monthly or at intervals required by the local health authority.

RATIONALE: This practice provides control of bacteria and algae and enhances the participants’ comfort and safety. Maintaining pH and disinfectant levels within the prescribed range suppresses bacterial growth to tolerable levels.

Bacteriologic water safety must be ensured to prevent the spread of disease via ingestion of pool water. The chemicals a pool needs to maintain the required standards differ from pool to pool – and day to day. Keeping records of the pool chemistry over time can help interpret its characteristics and aid in performing the correct task (1,3).

COMMENTS: If a stabilized chlorine compound is used, the pH should be maintained between 7.2 and 7.7, and the free available chlorine residual should be at least 1.50 ppm.

For further information, see the Model Aquatic Health Code from the Centers for Disease Control and Prevention (2).

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

REFERENCES:

Chapter 6: Play Areas/Playgrounds 282
Caring for Our Children: National Health and Safety Performance Standards

STANDARD 6.3.4.2: Chlorine Pucks

“Chlorine Pucks” must not be placed in skimmer baskets or placed anywhere in pools when children are present. If pucks are used, they must be dissolved before children enter the pool.

RATIONALE: Although this practice can keep chlorine disinfectant levels high, it can be dangerous because the “puck” is a concentrated form of chlorine and is very caustic. Curious children may take out a puck and handle it, causing serious skin irritation or burns (1). Contact with eyes can cause serious injury. Lung damage can occur if children inhale vapors, or children could ingest the poison.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

REFERENCES:

6.3.5 Other Water Play Areas

STANDARD 6.3.5.1: Hot Tubs, Spas, and Saunas

Children should not be permitted in hot tubs, spas, or saunas in child care. Areas should be secured to prevent any access by children.

RATIONALE: Any body of water, including hot tubs, pails, and toilets, presents a drownng risk to young children (1-3). Toddlers and infants are particularly susceptible to overheating.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 6.3.1.1: Enclosure of Bodies of Water
Standard 6.3.1.4: Safety Covers For Swimming Pools
Standard 6.3.1.6: Pool Drain Covers

REFERENCES:

STANDARD 6.3.5.2: Water in Containers

Bathtubs, buckets, diaper pails, and other open containers of water should be emptied immediately after use.

RATIONALE: In addition to home swimming and wading pools, young children drown in bathtubs and pails (4). Bathtub drownings are equally distributed in both sexes. Any body of water, including hot tubs, pails, and toilets, presents a drowning risk to young children (1,2,4,5).

From 2003-2005, eleven children under the age of five died from drowning in buckets or containers that were being used for cleaning (4). Of all buckets, the five-gallon size presents the greatest hazard to young children because of its tall straight sides and its weight with even just a small amount of liquid. It is nearly impossible for top-heavy infants and toddlers to free themselves when they fall into a five-gallon bucket head first (3).

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

REFERENCES:

STANDARD 6.3.5.3: Portable Wading Pools

Portable wading pools should not be permitted.

RATIONALE: Small portable wading pools do not permit adequate control of sanitation and safety, and they promote transmission of infectious diseases (1,2).

COMMENTS: Sprinklers, hoses, or small individual water buckets are safe alternatives as a cooling or play activity, under close supervision.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

REFERENCES:

6.4 Toys

6.4.1 Selected Toys

STANDARD 6.4.1.1: Pool Toys

Tricycles, wagons, and other non-water toys should not be permitted on the pool deck. Use of flotation devices such as inflatable items (e.g., water wings), kick boards, etc. should be prohibited. Use of properly fitted and age-appropriate life
jackets according to the manufacturer’s instructions should be permitted with close supervision. All toys appropriate for water play should be removed from the pool after use so children are not tempted to reach for them.

Rationale: Playing with non-water toys, such as tricycles or wagons, on the pool deck may result in unintentional injuries or falls into the water. Reliance on flotation devices may give children false confidence in their ability to protect themselves in deep water. Flotation devices also may promote complacency in caregivers/teachers who believe the child is safe (1). Toys left near the pool may be tempting for a child who could reach for it and fall into the water.

Type of Facility: Center; Large Family Child Care Home; Small Family Child Care Home

Related Standards: Standard 6.3.1.5: Deck Surface

References:

Standard 6.4.1.2: Inaccessibility of Toys or Objects to Children Under Three Years of Age

Small objects, toys, and toy parts available to children under the age of three years should meet the federal small parts standards for toys. The following toys or objects should not be accessible to children under three years of age:

a) Toys or objects with removable parts with a diameter less than one and one-quarter inches and a length between one inch and two and one-quarter inches;
b) Balls and toys with spherical, ovoid (egg shaped), or elliptical parts that are smaller than one and three-quarters inches in diameter;
c) Toys with sharp points and edges;
d) Plastic bags;
e) Styrofoam objects;
f) Coins;
g) Rubber or latex balloons;
h) Safety pins;
i) Marbles;
j) Magnets;
k) Foam blocks, books, or objects;
l) Other small objects;
m) Latex gloves;
n) Bulletin board tacks;
o) Glitter.

Rationale: Injury and fatality from aspiration of small parts is well-documented (1, 2). Eliminating small parts from children’s environment will greatly reduce the risk (2). Objects should not be small enough to fit entirely into a child’s mouth.

According to the federal government’s small parts standard on a safe-size toy for children under three years of age, a small part should be at least one and one-quarter inches in diameter and between one inch and two and one-quarter inches long; any part smaller than this has a potential choking hazard.

Magnets generally are small enough to pass through the digestive tract, however, they can attach to each other across intestinal walls, causing obstructions and perforations within the gastrointestinal tract (3).

Glitter, inadvertently rubbed in eyes, has been known to scratch the surface of the eye and is especially hazardous in children under three years of age (3).

Toys can also contain many chemicals of concern such as lead, phthalates found in many polyvinylchloride (PVC) plastics, cadmium, chlorine, arsenic, bromine, and mercury. When children put toys in their mouths, they may be exposed to these chemicals.

Comments: Toys or games intended for use by children three to five years of age and that contain small parts should be labeled “CHOKING HAZARD—Small Parts. Not for children under three.” Because choking on small parts occurs throughout the preschool years, small parts should be kept away from children at least up to three years of age. Also, children occasionally have choked on toys or toy parts that meet federal standards, so caregivers/teachers must constantly be vigilant (2).

The federal standard that applies is Code of Federal Regulations, Title 16, Part 1501 – “Method for Identifying Toys and Other Articles Intended for Use by Children Under 3 Years of Age Which Present Choking, Aspiration, or Ingestion Hazards Because of Small Parts” – which defines the method for identifying toys and other articles intended for use by children under three years of age that present choking, aspiration, or ingestion hazards because of small parts. To obtain this publication, contact the Superintendent of Documents of the U.S. Government Printing Office or access online at http://www.access.gpo.gov/ nara/cfr/waisidx_04/16cfr1501_04.html. This information also is described in the U.S. Consumer Product Safety Commission (CPSC) document, “Small Parts Regulations: Toys and Products Intended for Use by Children Under 3 Years Old,” available online at http://www.cpsc.gov/businfo/ regsumsmall/parts.pdf. Also note the ASTM International (ASTM) standard “F963-08: Standard Consumer Safety Specification on Toy Safety.” To obtain this publication, contact the ASTM at http://www.astm.org.


New technologies have become smaller and smaller. Caregivers/teachers should be aware of items such as small computer components, batteries in talking books, mobile phones, portable music players, etc. that fall under item a) in the list of prohibited items.

HealthyToys.org is a good resource for information on chemical contents in toys (4).

Type of Facility: Center; Large Family Child Care Home; Small Family Child Care Home
REFERENCES:

STANDARD 6.4.1.3: Crib Toys

Crib gyms, crib toys, mobiles, mirrors, and all objects/toys are prohibited in or attached to an infant's crib. Items or toys should not be hung from the ceiling over an infant's crib.

RATIONALE: Falling objects could cause injury to an infant lying in a crib.

The presence of crib gyms presents a potential strangulation hazard for infants who are able to lift their head above the crib surface. These children can fall across the crib gym and not be able to remove themselves from that position (1). The presence of mobiles, crib toys, mirrors, etc. present a potential hazard if the objects can be reached and/or pulled down by an infant (1). Some stuffed animals and other objects that dangle from strings can wrap around a child's neck (2).

Soft objects/toys can cause suffocation.

COMMENTS: Ornamental or small toys are often hung over an infant to provide stimulation; however, the crib should be used for sleep only. The crib is not recommended as a place to entertain an infant or to "contain" an infant. If an infant is not content in a crib, the infant should be removed.

Even though this is best practice for infants in any environment, the recommendation for prohibiting all crib gyms, mobiles, and all objects/toys in or attached to cribs may differ from what is done at an infant's home. Caregivers/teachers have a professional responsibility to ensure a safe environment for children; therefore, crib care settings are held at a higher standard, warranting the removal of these potential hazards.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 3.1.4.1: Safe Sleep Practices and SIDS/Suffocation Risk Reduction

REFERENCES:


STANDARD 6.4.1.4: Projectile Toys

Projectile toys should be prohibited.

RATIONALE: These types of toys present high risks for aspiration, eye injuries, and other types of injuries (1).

COMMENTS: Examples of projectile toys are: darts, arrows, air-pumped ball launchers, and sling shots.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

REFERENCES:

STANDARD 6.4.1.5: Balloons

Infants, toddlers, and preschool children should not be permitted to inflate balloons, suck on or put balloons in their mouths nor have access to uninflated or underinflated balloons. Children under eight should not have access to latex balloons or inflated latex objects that are treated as balloons and these objects should not be permitted in the child care facility.

RATIONALE: Balloons are an aspiration hazard (1). The U.S. Consumer Product Safety Commission (CPSC) reported eight deaths from balloon aspiration with choking between 2006 and 2008 (1). Aspiration injuries occur from latex balloons or other latex objects treated as balloons, such as inflated latex gloves. Latex gloves are commonly used in child care facilities for diaper changing, but they should not be inflated (2). When children bite inflated latex balloons or gloves, these objects may break suddenly and blow an obstructing piece of latex into the child's airway. Exposure to latex balloons could trigger an allergic reaction in children with latex allergies.

Underinflated or uninflated balloons of all types could be chewed or sucked and pieces potentially aspirated.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 6.4.1.2: Inaccessibility of Toys or Objects to Children Under Three Years of Age

REFERENCES:
6.4.2 Riding Toys and Helmets

STANDARD 6.4.2.1: Riding Toys with Wheels and Wheeled Equipment

Riding toys (such as tricycles) and wheeled equipment (such as scooters) used in the child care setting should:

a) Be spokeless;

b) Be capable of being steered;

c) Be of a size appropriate for the child;

d) Have a low center of gravity;

e) Be in good condition, work properly, and free of sharp edges or protrusions that may injure the children;

f) Be non-motorized (excluding wheelchairs).

All riders should wear properly fitting helmets. See Standard 6.4.2.2 Helmets, regarding proper usage and type of helmet. Helmets should be removed once children are no longer using wheeled riding toys or wheeled equipment. Children should wear knee and elbow pads in addition to helmets when using wheeled equipment such as scooters, skateboards, rollerblades, etc.

Children should be closely supervised when using riding toys or wheeled equipment.

When not in use, riding toys with wheels and wheeled equipment should be stored in a location where they will not present a physical obstacle to the children and caregivers/teachers. The staff should inspect riding toys and wheeled equipment at least monthly for loose or missing hardware/parts, protrusions, cracks, or rough edges that can lead to injury.

RATIONALE: Riding toys can provide much enjoyment for children. However, because of their high center of gravity and speed, they often cause injuries in young children. Wheels with spokes can potentially cause entrapment injuries. Wearing helmets when children are learning to use riding toys or wheeled equipment teaches children the practice of wearing helmets while using any riding toy or wheeled equipment. Children should remove their helmets when they are no longer using a riding toy or wheeled equipment because helmets can be a potential strangulation hazard if they are worn for other activities (such as playing on playground equipment, climbing trees, etc.) and/or worn incorrectly.

Motorized wheeled equipment (excluding wheelchairs) used by children in a child care setting does not promote good physical activity (2). Vehicles used by children in child care need to be child propelled rather than battery propelled.

The U.S. Consumer Product Safety Commission (CPSC) and Centers for Disease Control and Prevention (CDC) reported in 2000 that 23% of children treated in emergency departments for scooter-related injuries were age eight or under (1).

Helmet use is associated with a reduction in the risk of any head injury by 69%, brain injury by 65%, and severe brain injuries by 74%, and recommended for all children one year of age and over (3).

COMMENTS: Concern regarding the spreading of head lice in sharing helmets should not override the practice of using helmets. The prevention of a potential brain injury heavily outweighs a possible case of head lice. While it is best practice for each child to have his/her own helmet, this may not be possible. If helmets need to be shared, it is recommended to clean the helmet between users. Wiping the lining with a damp cloth should remove any head lice, nits, or fungal spores. More vigorous washing of helmets, using detergents, cleaning chemicals, and sanitizers, is not recommended because these chemicals may cause the physical structure of the impact-absorbing material to deteriorate inside the helmet. The use of these chemicals can also deteriorate the straps used to hold the helmet on the head.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standards 3.3.0.2-3.3.0.3: Cleaning and Sanitizing Toys and Objects Intended for the Mouth
Standards 6.4.1.2-6.4.1.5: Special Play Equipment Requirements for Infants, Toddlers, and Preschoolers
Standard 6.4.2.2: Helmets
Appendix II: Bike Helmets: Quick-Fit Check

REFERENCES:

STANDARD 6.4.2.2: Helmets

All children one year of age and over should wear properly fitted and approved helmets while riding toys with wheels (tricycles, bicycles, etc.) or using any wheeled equipment (rollerblades, skateboards, etc.). Helmets should be removed as soon as children stop riding the wheeled toys or using wheeled equipment. Approved helmets should meet the standards of the U.S. Consumer Product Safety Commission (CPSC) (5). The standards sticker should be located on the bike helmet. Bike helmets should be replaced if they have been involved in a crash, the helmet is cracked, when straps are broken, the helmet can no longer be worn properly, or according to recommendations by the manufacturer (usually after three years).

RATIONALE: Injuries occur when riding tricycles, bicycles, and other riding toys or wheeled equipment. Helmet use is associated with a reduction in the risk of any head injury by 69%, brain injury by 65%, and severe brain injuries by 74%, and recommended for all children one year of age and over (1-3).
Helmets can be a potential strangulation hazard if they are worn for activities other than when using riding toys or wheeled equipment and/or when worn incorrectly. It is not recommended that infants (children under the age of one year) wear helmets or ride as a passenger on wheeled equipment. Infants are just learning to sit unsupported at about nine months of age. Until this age, infants have not developed sufficient bone mass and muscle tone to enable them to sit unsupported with their backs straight. Pediatricians advise against having infants sitting in a slumped or curled position for prolonged periods due to the underdevelopment of their neck muscles (4). This situation may even be exacerbated by the added weight of a bicycle helmet on the infant’s head. Because pediatricians recommend against having children under age one as passengers on bicycles, the CPSC does not want the certification label to imply that children under age one can ride safely.

COMMENTS: The CPSC helmet standard became effective in February 1999 (5). Bike helmets manufactured or imported for sale in the U.S. after January 1999 must meet the CPSC standard. Helmets made before this date will not have a CPSC approval label. However, helmets made before this date should have an ASTM International (ASTM) approval label. The American National Standard Institute (ANSI) standard for helmet approval has been withdrawn, and ANSI approval labels will no longer appear on helmets. The Snell Memorial Foundation also no longer certifies bike helmets.

Concern regarding the spreading of head lice when sharing helmets should not override the practice of using helmets. The prevention of a potential brain injury heavily outweighs a possible case of head lice. While it is best practice for each child to have his/her own helmet, this may not be possible. If helmets need to be shared, it is recommended to clean the helmet between users. Wiping the lining with a damp cloth should remove any head lice, nits, or fungal spores. More vigorous washing of helmets, using detergents, cleaning chemicals, and sanitizers, is not recommended because these chemicals may cause the physical structure of the impact-absorbing material to deteriorate inside the helmet as well as deteriorate the straps.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 6.4.2.1: Riding Toys with Wheels and Wheeled Equipment

REFERENCES:

**STANDARD 6.4.2.3: Bike Routes**

For facilities providing care for school-age children and permitting bicycling as an activity, the bike routes allowed should be reviewed and approved in writing by the local police and taught to the children in the facility. Children should wear safety helmets as described in Standard 6.4.2.2.

**RATIONALE:** School-age children who use bicycles for transportation should use bike routes that present the lowest potential for injury. Review and approval of bike routes by the local police minimizes the potential danger (1).

**TYPE OF FACILITY:** Center; Large Family Child Care Home; Small Family Child Care Home

**RELATED STANDARDS:**
Standard 6.4.2.2: Helmets

**REFERENCES:**

**6.5 Transportation**

**6.5.1 Transportation Staff**

**STANDARD 6.5.1.1: Competence and Training of Transportation Staff**

At least one adult who accompanies or drives children for field trips and out-of-facility activities should receive training by a professional knowledgeable about child development and procedures, to ensure the safety of all children. The caregiver should hold a valid pediatric first aid certificate, including rescue breathing and management of blocked airways, as specified in First Aid and CPR Standards 1.4.3.1-1.4.3.3. Any emergency medications that a child might require, such as self-injecting epinephrine for life-threatening allergy, should also be available at all times as well as a mobile phone to call for medical assistance. Child/staff ratios should be maintained on field trips and during transport, as specified in Standards 1.1.1.1-1.1.1.5; the driver should not be included in these ratios. No child should ever be left alone in the vehicle.

All drivers, passenger monitors, chaperones, and assistants should receive instructions in safety precautions. Transportation procedures should include:

a) Use of developmentally appropriate safety restraints;

b) Proper placement of the child in the motor vehicle in accordance with state and federal child restraint laws and regulations and recognized best practice;

c) Training in handling of emergency medical situations. If a child has a chronic medical condition or special healthcare needs that could result in an emergency (such as asthma, diabetes, or seizures), the driver or chaperone should have written instructions including parent/guardian emergency contacts, child summary
health information, special needs and treatment plans, and should:
1) Recognize the signs of a medical emergency;
2) Know emergency procedures to follow (3);
3) Have on hand any emergency supplies or medications necessary, properly stored out of reach of children;
4) Know specific medication administration (ex. a child who requires EpiPen or diazepam);
5) Know about water safety when field trip is to a location with a body of water.
d) Knowledge of appropriate routes to emergency facility;
e) Defensive driving;
f) Child supervision during transport, including never leaving a child unattended in or around a vehicle;
g) Issues that may arise in transporting children with behavioral issues (e.g., temper tantrums or oppositional behavior).

The receipt of such instructions should be documented in a personnel record for any paid staff or volunteer who participates in field trips or transportation activities.

Vehicles should be equipped with a first aid kit, fire extinguisher, seat belt cutter, and maps. At least one adult should have a functioning cell phone at hand. Information, names of the children and parent/guardian contact information should be carried in the vehicle along with identifying information (name, address, and telephone number) about the child care center.

RATIONALE: Injuries are more likely to occur when a child's surroundings or routine changes. Activities outside the facility may pose increased risk for injury. When children are excited or busy playing in unfamiliar areas, they are more likely to forget safety measures unless they are closely supervised at all times.

Children have died from heat stress from being left unattended in closed vehicles. Temperatures in hot motor vehicles can reach dangerous levels within fifteen minutes. Due to this danger, vehicles should be locked when not in use and checked after use to make sure no child is left unintentionally in a vehicle. Children left unattended also can be victims of backovers (when an unseen child is run over by being behind a vehicle that is backing up), power window strangulations, and other preventable injuries (1,2).

All adults cannot be assumed to be knowledgeable about the various developmental levels or special needs of children. Training by someone with appropriate knowledge and experience is needed to appropriately address these issues. This is particularly important with high incidence disabilities such as autistic spectrum disorders and ADHD.

COMMENTS: When field trips are planned, all field trip sites should be visited by a member of the child care staff and all potential hazards identified. The child care staff should be knowledgeable about location and any emergency plans of the location. For example, if the children are taken to the zoo, the zoo will have its own emergency procedures that the child care would be expected to follow. This standard also applies when caregivers/teachers are walking with children to and from a destination.

A designated staff person should check to ensure all children safely exit the vehicle when it arrives at the designated location. This may include use of an attendance list of all children being transported so it can be checked against those who get out of the vehicle. Also, have another staff member do a thorough and complete inspection of the vehicle to see that the vehicle is empty before locking.


TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
- Standards 1.1.1.1-1.1.1.5: Child Staff Ratio and Group Size
- Standards 1.4.3.1-1.4.3.3: First Aid and CPR
- Standards 2.2.0.4-2.2.0.5: Water Safety
- Standard 5.3.1.12: Availability and Use of a Telephone or Wireless Communication Device
- Standard 6.5.2.1: Drop-Off and Pick-Up
- Standard 6.5.2.4: Interior Temperature of Vehicles

REFERENCES:

STANDARD 6.5.1.2: Qualifications for Drivers

Any driver who transports children for a child care program should be at least twenty-one years of age and should have:

a) A valid commercial driver's license that authorizes the driver to operate the vehicle being driven;
b) Evidence of a safe driving record for more than five years, with no crashes where a citation was issued;
c) No alcohol, prescription or over-the-counter medications, or other drugs associated with impaired ability to drive, within twelve hours prior to transporting children. Drivers should ensure that any prescription or over-the-counter drugs taken will not impair their ability to drive;
d) No tobacco, alcohol, or drug use while driving;
e) No criminal record of crimes against or involving children, child neglect or abuse, substance abuse, or any crime of violence;
f) No medical condition that would compromise driving, supervision, or evacuation capability including fatigue and sleep deprivation;
g) Valid pediatric CPR and first aid certificate if transporting children alone.

The driver’s license number and date of expiration, vehicle insurance information, and verification of current state vehicle inspection should be on file in the facility.

The child care program should require drug testing when noncompliance with the restriction on the use of alcohol or other drugs is suspected.

RATIONALE: Driving children is a significant responsibility. Child care programs must assure that anyone who drives the children is competent to drive the vehicle being driven.

Patients treated with benzodiazepines, GABAergic compounds, or tricyclic antidepressants (TCAs) should be cautioned when driving a car. Studies have shown significant impairment after administration of these medications. Driving a car when treated with buspirone, venlafaxine, 5-HT antagonists, and SSRIs seems relatively safe (1).

COMMENTS: The driver should advise his/her primary care provider of his/her job and question whether it is safe to drive children while on medication(s) prescribed. Compliance can be measured by testing blood or urine levels for drugs. Refusal to permit such testing should preclude continued employment.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standard 6.5.2.5: Distractions While Driving
Standards 9.2.5.1-9.2.5.2: Transportation Policies

REFERENCES:

6.5.2 Transportation Safety

STANDARD 6.5.2.1: Drop-Off and Pick-Up

The facility should have, and communicate to staff and parents/guardians, a plan for safe, supervised drop-off and pick-up points and pedestrian crosswalks in the vicinity of the facility. The plan should require drop off and pick up only at the curb or at an off-street location protected from traffic. The facility should assure that any adult who supervises drop-off and loading can see and assure that children are clear of the perimeter of all vehicles before any vehicle moves. The staff will keep an accurate attendance and time record of all children picked up and dropped off. The facility should assure that a staff member or adult parent/guardian is observing the process of dropping off and picking up children. The adult who is supervising the child should be required to stay with each child until the responsibility for that child has been accepted by the individual designated in advance to care for that child.

RATIONALE: Injuries and fatalities have occurred during the loading and unloading process, especially in situations where vans or school buses are used to transport children. Increased supervision and interactions between adults and children promotes safety and helps children learn to be aware of their surroundings.

COMMENTS: The staff should examine the parking area and determine the safest way to drop off and pick up children (1). Plans for loading and unloading should be discussed and demonstrated with the children, families, caregivers/teachers, and drivers.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

REFERENCES:

STANDARD 6.5.2.2: Child Passenger Safety

When children are driven in a motor vehicle other than a bus, school bus, or a bus operated by a common carrier, the following should apply:

a) A child should be transported only if the child is restrained in developmentally appropriate car safety seat, booster seat, seat belt, or harness that is suited to the child's weight, age, and/or psychological development in accordance with state and federal laws and regulations and the child is securely fastened, according to the manufacturer's instructions, in a developmentally appropriate child restraint system.

b) Age and size-appropriate vehicle child restraint systems should be used for children under eighty pounds and under four-feet-nine-inches tall and for all children considered too small, in accordance with state and federal laws and regulations, to fit properly in a vehicle safety belt. The child passenger restraint system must meet the federal motor vehicle safety standards contained in the Code of Federal Regulations, Title 49, Section 571.213 (especially Federal Motor Vehicle Safety Standard 213), and carry notice of such compliance.

c) For children who are obese or overweight, it is important to find a car safety seat that fits the child properly. Caregivers/teachers should not use a car safety seat if the child weighs more than the seat’s weight limit or is taller than the height limit. Caregivers/teachers should check the labels on the seat or manufacturer's instructions if they are unsure of the limits. Manufacturer's instructions that include these specifications can also be found on the manufacturer's Website.

d) Child passenger restraint systems should be installed and used in accordance with the manufacturer's instructions and should be secured in back seats only.

e) All children under the age of thirteen should be transported in the back seat of a car and each child not riding in an appropriate child restraint system (i.e.,
a child seat, vest, or booster seat), should have an individual lap-and-shoulder seat belt (2).

f) For maximum safety, infants and toddlers should ride in a rear-facing orientation (i.e., facing the back of the car) until they are two years of age or until they have reached the upper limits for weight or height for the rear-facing seat, according to the manufacturer’s instructions (1). Once their seat is adjusted to face forward, the child passenger must ride in a forward-facing child safety seat (either a convertible seat or a combination seat) until reaching the upper height or weight limit of the seat, in accordance with the manufacturer's instructions (10). Plans should include limiting transportation times for young infants to minimize the time that infants are sedentary in one place.

g) A booster seat should be used when, according to the manufacturer's instructions, the child has outgrown a forward-facing child safety seat, but is still too small to safely use the vehicle seat belts (for most children this will be between four feet nine inches tall and between eight and twelve years of age) (1).

h) Car safety seats, whether provided by the child’s parents/guardians or the child care program, should be labeled with the child passenger's name and emergency contact information.

i) Car safety seats should be replaced if they have been recalled, are past the manufacturer’s “date of use” expiration date, or have been involved in a crash that meets the U.S. Department of Transportation crash severity criteria or the manufacturer’s criteria for replacement of seats after a crash (3,11).

j) The temperature of all metal parts of vehicle child restraint systems should be checked before use to prevent burns to child passengers.

If the child care program uses a vehicle that meets the definition of a school bus and the school bus has safety restraints, the following should apply:

a) The school bus should accommodate the placement of wheelchairs with four tie-downs affixed according to the manufactures’ instructions in a forward-facing direction;

b) The wheelchair occupant should be secured by a three-point tie restraint during transport;

c) At all times, school buses should be ready to transport children who must ride in wheelchairs;

d) Manufacturers’ specifications should be followed to assure that safety requirements are met.

RATIONALE: According to the National Center for Health Statistics, motor vehicle crashes are the leading cause of death among children ages three to fourteen in the United States (4). Safety restraints are effective in reducing death and injury when they are used properly. The best car safety seat is one that fits in the vehicle being used, fits the child being transported, has never been in a crash, and is used correctly every time. The use of restraint devices while riding in a vehicle reduces the likelihood of any passenger suffering serious injury or death if the vehicle is involved in a crash. The use of child safety seats reduces risk of death by 71% for children less than one year of age and by 54% for children ages one to four (4). In addition, booster seats reduce the risk of injury in a crash by 45%, compared to the use of an adult seat belt alone (5).

The safest place for all infants and children under thirteen years of age is to ride in the back seat. Head-on crashes cause the greatest number of serious injuries. A child sitting in the back seat is farthest away from the impact and less likely to be injured or killed. Additionally, new cars, trucks and vans have had air bags in the front seats for many years. Air bags inflate at speeds up to 200 mph and can injure small children who may be sitting too close to the air bag or who are positioned incorrectly in the seat. If the infant is riding in the front seat, a rapidly inflating air bag can hit the back of a rear-facing infant seat behind a baby’s head and cause severe injury or death. For this reason, a rear-facing infant must NEVER be placed in the front seat of a vehicle with active passenger air bags.

Infants under one year of age have less rigid bones in the neck. If an infant is placed in a child safety seat facing forward, a collision could snap the infant’s head forward, causing neck and spinal cord injuries. If an infant is placed in a child safety seat facing the rear of the car, the force of a collision is absorbed by the child restraint and spread across the infant’s entire body. The rigidity of the bones in the neck, in combination with the strength of connecting ligaments, determines whether the spinal cord will remain intact in the vertebral column. Based on physiologic measures, immature and incompletely ossified bones will separate more easily than more mature vertebrae, leaving the spinal cord as the last link between the head and the torso (6). After twelve months of age, more moderate consequences seem to occur than before twelve months of age (7). However, rear-facing positioning that spreads deceleration forces over the largest possible area is an advantage at any age. Newborns seated in seat restraints or in car beds have been observed to have lower oxygen levels than when placed in cribs, as observed over a period of 120 minutes in each position (8).

As of March 1, 2010, all but three states required booster seat use for children up to as high as nine years of age. Child passenger restraints are recommended increasingly for older children. State child restraint requirements are listed by state at: http://www.ihs.gov/laws/ChildRestraint.aspx. Booster seats are recommended for use only with both lap and shoulder belts; NEVER install a booster seat with the lap belt only. When the vehicle safety belts fit properly, the lap belt lies low and tightly across the child’s upper thighs (not the abdomen) and the shoulder belt lies flat across the chest and shoulder, away from the neck and face.

COMMENTS: A Child Passenger Safety Technician may be able to help find a car safety seat that fits a larger child. Car safety seat manufacturers increasingly are making car safety seats that fit larger children. To locate a Child Passenger Safety Technician see https://ssl13.czyap.net/dzapps/dbzap.bin/apps/assess/webmembers/tool?pToolCode=TAB
When school buses meet current standards for the transport of school-age children, containment design features help protect children from injury, although the use of seat belts would provide additional protection. The U.S. Department of Transportation and U.S. Federal Motor Vehicle Safety standards for school buses apply only to vehicles equipped with factory-installed seat belts after 1967. To obtain the Federal Regulations, contact the Superintendent of Documents at the Government Printing Office.

Written transportation policy that is communicated to parents/guardians, staff, and all who transport children can help assure understanding of requirements/recommendations for child passenger safety as well as decisions about the value/necessity of the trip.


**TYPE OF FACILITY:** Center; Large Family Child Care Home; Small Family Child Care Home

**RELATED STANDARDS:** Standard 2.2.0.2: Limiting infant/Toddler Time in Crib, High Chair, Car Seat, Etc.
Standard 6.5.3.1: Passenger Vans Standards 9.2.5.1-9.2.5.2: Transportation Policies

**REFERENCES:**

**STANDARD 6.5.2.3: Child Behavior During Transportation**

Children, as both passengers and pedestrians, should be instructed in safe transportation behavior using terms and concepts appropriate for their age and stage of development.

**RATIONALE:** Teaching passenger safety to children reduces injury from motor vehicle crashes to young children (2). Young children need to develop skills that will aid them in assuming responsibility for their own health and safety, and these skills can be developed through health and safety education implemented during the early years (1,3). Supervision of children will help to reinforce appropriate behaviors.

**COMMENTS:** Examples of safe behavior training include wearing seat belts and staying in position. Curricula and materials can be obtained from state departments of transportation, the American Automobile Association (AAA), the American Academy of Pediatrics (AAP), the American Red Cross, and the National Association for the Education of Young Children (NAEYC).

**TYPE OF FACILITY:** Center; Large Family Child Care Home; Small Family Child Care Home

**REFERENCES:**

**STANDARD 6.5.2.4: Interior Temperature of Vehicles**

The interior of vehicles used to transport children should be maintained at a temperature comfortable to children. When the vehicle’s interior temperature exceeds 82°F and providing fresh air through open windows cannot reduce the temperature, the vehicle should be air-conditioned. When the interior temperature drops below 65°F and when children are feeling uncomfortably cold, the interior should be heated. To prevent hyperthermia, all vehicles should be locked when not in use, head counts of children should be taken after transporting to prevent a child from being left unintentionally in a vehicle, and children should never be intentionally left in a vehicle unattended.
Caring for Our Children: National Health and Safety Performance Standards

RATIONALE: Some children have problems with temperature variations. Whenever possible, opening windows to provide fresh air to cool a hot interior is preferable before using air conditioning. Over-use of air conditioning can increase problems with respiratory infections and allergies. Excessively high temperatures in vehicles can cause neurological damage in children (1).

Children's bodies overheat three to five times faster than adults because the hypothalamus regions of their brains, which control body temperature, are not as developed (1).

About thirty-seven children die every year from hyperthermia when they're left in cars and the cars quickly heat up. Even with comfortable temperatures outdoors, the temperature in an enclosed car climbs rapidly.

Temperature increase inside a car with an outside temperature of 80°F (elapsed time in minutes) (2):
- After ten minutes: 99°F inside car;
- After twenty minutes: 109°F;
- After thirty minutes: 114°F;
- After forty minutes: 118°F;
- After fifty minutes: 120°F;
- After sixty minutes: 123°F.

COMMENTS: In geographical areas that are prone to very cold or very hot weather, a small thermometer should be kept inside the vehicle. In areas that are very cold, adults tend to wear very warm clothing and children tend to wear less clothing than might actually be required. Adults in a vehicle, then, may be comfortable while the children are not. When air conditioning is used, adults might find the cool air comfortable, but the children may find that the cool air is uncomfortably cold. To determine whether the interior of the vehicle is providing a comfortable temperature to children, a thermometer should be used and children in the vehicle should be asked if they are comfortable. Non-verbal children and infants should be assessed by an adult for signs of hypo- or hyperthermia. Signs of hyperthermia include: cold skin, very low energy, and may be non-responsive. Young infants do not shiver when cold. Signs of hyperthermia include: dizziness, disorientation, agitation, confusion, sluggishness, seizures, hot dry skin that is flushed but not sweaty, loss of consciousness, rapid heartbeat, hallucinations (2).

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
- Standard 5.3.1.12: Availability and Use of a Telephone or Wireless Communication Device

REFERENCES:

STANDARD 6.5.2.6: Route to Emergency Medical Services

Any driver who transports children for a child care program should keep in the vehicle instructions for the quickest route to the nearest emergency medical facility from any point on the route.

RATIONALE: Driving children is a significant responsibility. Child care programs must assure that anyone who transports children can obtain emergency care promptly.

COMMENTS: Some hospitals in rural areas do not have emergency rooms. The driver must be knowledgeable of this fact and know where the nearest emergency facility is located. Maps are required in case transporting staff need to find an alternate way to emergency services when roads are closed and/or communication and power systems are inaccessible. Programs may want to have access to hand-held or stationary electronic/cellular, or satellite devices (e.g., GIS systems or devices that include relevant features) when transporting to help locate alternative routes during an emergency.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

STANDARD 6.5.2.5: Distractions While Driving

The driver should not play the radio or CD player or use ear phones to listen to music or other distracting sounds while children are in the vehicles operated by the facility. The use of portable telephones or other devices to send or receive text messages, check email, etc. should be prohibited at all times while the vehicle is in motion or on an active road or highway (1,2,4). These devices should be used only when the vehicle is stopped and in emergency situations only.

In each vehicle from a center, a sign should be posted stating "NO RADIOS, TAPES, OR CDs."

RATIONALE: Loud noise interferes with normal conversation and may be especially disturbing to certain children. It is also distracting to the driver and the passenger monitor or assistant attending to the children in the vehicle (3).

COMMENTS: A driver's use of a portable radio, tape, mp3, or CD player with earphones is unacceptable.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

REFERENCES:
6.5.3 Vehicles

STANDARD 6.5.3.1: Passenger Vans

Child care facilities that provide transportation to children, parents/guardians, staff, and others should avoid the use of fifteen-passenger vans whenever possible. Other vehicles, such as vehicles meeting the definition of a "school bus," should be used to fulfill transportation of child passengers in particular. Conventional twelve- to fifteen-passenger vans cannot be certified as school buses by the National Highway Traffic Safety Administration (NHTSA) standards (2,4), and thus cannot be sold or leased, as new vehicles, to carry students on a regular basis. Caregivers/teachers should be knowledgeable about the laws of the state(s) in which their vehicles, including passenger vans, will be registered and used.

RATIONALE: Fifteen-passenger vans are more likely to be involved in a single-vehicle rollover crash than any other type of vehicle (1). Fifteen-passenger vans typically have seating positions for a driver and fourteen passengers. The risk of a rollover crash is greatly increased when ten or more people ride in a fifteen-passenger van (1). This increased risk occurs because the passenger weight raises the vehicle’s center of gravity and causes it to shift rearward. As a result, the van has less resistance to rollover and handles differently from other commonly driven passenger vehicles, making it more difficult to control in an emergency situation (3). Occupant restraint use is especially critical because large numbers of people die in rollover crashes when they are partially or completely thrown from the vehicle. The National Highway Traffic Safety Administration (NHTSA) estimates that people who wear their seat belts are about 75% less likely to be killed in a rollover crash than people who do not.

The NHTSA has the authority to regulate the first sale or lease of a new vehicle by a dealer. The applicable statute requires any person selling or leasing a new vehicle to sell or lease a vehicle that meets all applicable standards (6). Under NHTSA’s regulations, a “bus” is any vehicle, including a van, which has a seating capacity of eleven persons or more. The statute defines a “school bus” as any bus which is likely to be “used significantly” to transport “pre-primary, primary, and secondary” students to or from school or related events (5). A twelve- to fifteen-passenger van that is likely to be used significantly to transport students is a “school bus” by this definition, but cannot be certified as such.

COMMENTS: State law may require school bus equipment not specified in NHTSA regulations. Each state regulates how school buses are to be used and which agencies are responsible for developing and enforcing school bus regulations. In some states, requirements for transporting public school children differ from requirements for transporting children attending private schools and non-school organizations (e.g., Head Start programs, child care agencies, etc.) For further information about state school bus regulations, contact the applicable State Director of Pupil Transportation. A list of State Directors can be obtained at http://www.nasdpts.org or by calling 1-800-585-0340.

Organizations that use fifteen-passenger vans to transport children, students, seniors, sports groups, or others, need to be informed about how to reduce rollover risks, avoid potential dangers, and better protect occupants in the event of a rollover crash. Drivers should be alert to these vehicles' high center of gravity – particularly when fully loaded – and their increased chance of rollover. The following are the NHTSA’s official recommendations (1):

a) Caregivers/teachers should keep passenger load light. NHTSA research has shown that fifteen-passerger vans have a rollover risk that increases dramatically as the number of occupants increases from fewer than five to more than ten. In fact, fifteen-passenger vans (with ten or more occupants) had a rollover rate in single vehicle crashes that is nearly three times the rate of those that were lightly loaded.

b) The van's tire pressure should be checked frequently — at least once a week. A just-released NHTSA study found that 74% of all fifteen-passenger vans had improperly inflated tires. By contrast, 39% of passenger cars had improperly inflated tires. Improperly inflated tires can change handling characteristics, increasing the prospect of a rollover crash in fifteen-passenger vans.

c) Require all occupants to use their seat belts or the appropriate child restraint. Nearly 80% of those who have died nationwide in fifteen-passenger vans were not buckled up. Wearing seat belts dramatically increases the chances of survival during a rollover crash.

d) If at all possible, seat passengers and place cargo forward of the rear axle — and avoid placing any loads on the roof. By following these guidelines, you’ll lower the vehicle’s center of gravity and lower the chance of a rollover crash.

e) Be mindful of speed and road conditions. The analysis of fifteen-passenger van crashes also shows that the risk of rollover increases significantly at speeds over fifty miles per hour and on curved roads (1).

f) Only qualified drivers should be behind the wheel. Special training and experience are required to properly operate a fifteen-passenger van. Drivers should only operate these vehicles when well rested and fully alert.


TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

RELATED STANDARDS:
Standards 9.2.5.1-9.2.5.2: Transportation Policies
REFERENCES: