CPSC Guidelines for Age-Related Activities

Summary: These guidelines for ages when children are ready to use wheeled toys and vehicles come from the US Consumer Product Safety Commission's Age Determination Guidelines: Relating Children’s Ages To Toy Characteristics and Play Behavior as well as the guidelines for riding on All Terrain Vehicles publications.

Ride-On Toys

Ride-on toys are those that allow a child to propel him or herself, either under his or her own power or through the use of an electric or gasoline motor. Ride-on toys are very popular with children, who enjoy both the sense of movement that they get from wheeled toys and the pretend element that wheeled toys give them as they imitate the important adults in their lives.

Ride-on toys are important for developing a sense of balance, physical fitness, and coordination. The ride-on toys covered under this category include sit-on riders, motorized vehicles, bicycles, skateboards, scooters and tricycles, and rocker toys. Several physical factors affect the age level for using ride-on toys. The first factor is balance. Depending on the vehicle, more or less balance is required to use the vehicle. In general, wide-spaced wheels and more wheels make the vehicle easier to balance. The second factor is the rotational speed of the wheels. Wheels that turn very easily can move faster and speed of movement increases the difficulty level. The final factor is the method of propulsion. A wheeled vehicle that relies on children pushing with their feet will move slowest, while wheeled vehicles propelled by pedaling or that use gears can be used at greater speeds. Motorized vehicles can be set at different speeds, with increased speed requiring greater physical skill. Children under the age of 1 year cannot use ride-on toys because they require a sense of balance to operate. The balance that is required to use a ride-on toy usually develops when a child begins to walk with some steadiness.
In general, ride-on toys are not recommended for use without proper protective gear, especially helmets. One should place primary emphasis or importance on the following characteristics when determining the age appropriateness of ride-on toys:

1. Size of Parts (or of toy itself)  
2. Motor Skills Required  
3. Licensing  
4. Level of Realism/Detail

The order of the above characteristics does not necessarily indicate priority, however, because this can change with age. The remaining discussion describes the relationship between the characteristics of these toys and the characteristics of children in various age groups. This includes a description of what types of ride-on toys are appropriate and how a particular age group plays with these toys.

12 Through 18 Months

Children become capable of using ride-on toys that are straddled and propelled by their feet only after they learn to walk with some steadiness. These children, especially the youngest in this age group, may not be able to alternate their feet when pushing ride-on toys. They cannot yet pedal, and will propel the ride-on by pushing with both feet simultaneously instead. For safety reasons ride-on toys must be stable, and vehicles with four or more wheels tend to be more stable than three- or two-wheeled vehicles. Appropriate ride-on toys have wheels that are spaced relatively wide apart to be stable, but not so wide apart that it is difficult for children to swing their legs over the seat. The toy should be low for easy mounting and dismounting, and the children’s feet should be flat on the floor when they are seated.

For maneuverability, recessed wheels make it easier for the child to push her or himself along without banging the feet or legs into the wheels. Castors or wheels are appropriate. For the youngest children in this age group, castors may be preferable because they allow the toy to move in any direction without tipping. The first ride-on toys do not need to have steering mechanisms because young toddlers may not be able to use them effectively. Simple rocking horses may be introduced. Suitable ones are small and easily mounted to reduce risk of falling. Children’s feet should touch the floor or the base of the horse when they are seated, and the horse should have a confined rocking arc.

19 Through 23 Months

Children 19 through 23 months old can operate ride-on toys in which they sit inside and propel the toy by pushing with their feet. However, these are more difficult to use than the straddle ride on toys because they are harder to steer and maneuver. Features that make ride-on toys more attractive to toddlers include bright colors, special sound effects like beeping horns or those produced by vehicle movement, and covered compartments or storage bins. Children at this age are interested in cause-and-effect actions that produce sounds or reveal hidden items. These children are also interested in carrying and collecting items that they can put in storage bins or compartments. Wagons are appropriate. Suitable rocking horses are small and easily mounted to reduce risk of falling. Children’s feet should touch the floor or the base of the horse when they are seated, and the horse should have a confined rocking arc.
Features that make rocking horses popular include their realistic or nostalgic (like those popular for previous generations of children) appearance, and their ability to make sounds. With adult supervision, some children may be capable of making a slow-moving motorized vehicle stop and go, but these children are unlikely to have the steering skills needed to avoid obstacles and hazards.

2 Years

Children 2 years old enjoy the same characteristics and features of ride-on toys as younger children. Pretend play begins to appear around this age so vehicles that are realistic, like pretend fire engines, are popular. Parents are also interested in encouraging pretend play and are very likely to buy realistic-looking vehicles for this age group. Children of this age group have increased coordination and balance so they can maneuver a ride-on that requires them to bounce up and down in the seat. Slow-moving three-wheeled scooters with wide standing platforms also become attractive to these children. They are learning to pedal and some children may start using tricycles with pedals—especially during the latter half of this age period. However, they have not mastered this skill yet. Battery-operated vehicles appeal to both parents and children for this age group. Although these children are physically capable of steering vehicles of this type, most 2-year-olds lack the steering skills needed to control slow-moving motorized vehicles and to avoid hazards.

3 Years

Children at age 3 have developed the ability to pedal, and have the coordination required to use a steering wheel or handlebar. They can use three-wheeled scooters, but they have not developed the balance required to operate two-wheeled scooters and bicycles. These children enjoy tricycles and four-wheeled vehicles propelled by pedaling. Tricycles should be sized to the child, and 12- or 13-inch wheels are about the right size for these children. They can use a small bicycle with training wheels, but foot brakes are preferred because these children cannot yet use hand brakes. Children at age 3 can steer a slow-moving battery-operated vehicle.

4 Through 5 Years

Children 4 and 5 years old are interested in vehicles used by older peers. They have little interest in the types of ride-on toys that are commonly used by younger children, and prefer the bicycles and scooters used by older peers. They begin to show an interest in skateboards. They can use battery-operated vehicles, and depending on experience, most children by the age of 5 have the balance and coordination to use two-wheeled scooters and bicycles without training wheels. However, these children do not understand the risks of riding in areas with cars, and are at a very high risk of falling and injuring themselves. Therefore, adult supervision is a must.
6 Through 8 Years

Most children have the physical ability to ride a bicycle without training wheels by the age of 6. They also have developed some understanding of the consequences of riding in areas shared by cars and pedestrians. Six-year-olds have developed the coordination to use hand brakes, and appropriately sized bicycles allow them to stand and straddle the bicycle with both feet on the ground. Children of this age group are very interested in popular wheeled vehicles like scooters and skateboards, and can operate slow-moving motorized vehicles, particularly those with four wheels.

9 Through 12 Years

Children 9 through 12 years old are very capable bicycle and scooter riders, and they can use bicycles with hand gears for different speeds. Bicycles and skateboards that are from licensed brand names or used by popular extreme sports riders are popular with this age group. They are usually fairly aware of traffic laws, but they are very likely to engage in high-risk behaviors like riding in traffic and stunt riding. Generally, 9- through 12-year-old children can operate a motorized wheeled vehicle that does not exceed 10 miles per hour and has gear shifting. Faster moving motorized bicycles and scooters are generally not appropriate even for 12-year-olds because of difficulty associated with both balancing and steering the vehicle while moving.

All Terrain Vehicles

Children under 16 years old lack the developmental skills to safely drive adult ATVs. These ATVs – with engine sizes over 90 cubic centimeters (cc) – can go over 70 mph and weigh hundreds of pounds. Current industry and CPSC recommendations are for children and young teens to be restricted to ATVs with engine sizes of 90 cc or below. Children under 6 should never be on an ATV – either as a driver or passenger. Young children lack the physical ability and mental skills to safely maneuver a motorized vehicle with multiple speeds and controls.

Most ATVs are equipped with a label detailing the manufacturer’s and CPSC’s recommended age for that particular model. The recommended ages for Y-6 models (under 70 cc engines) are 6 to 11; the recommended ages for the Y-12 models (70 to 90 cc engines) are 12 to 15.

By age 6, some children can drive youth ATVs with simple controls at very low speeds. Many young children cannot grasp gear shifting or understand and apply most safety rules – especially in situations where quick recall is needed. A Y-6 ATV is designed to go up to 15 miles per hour; however, Y-6 ATVs are equipped with a device that can limit the speed to 10 miles per hour.

By ages 12 to 13, many children can drive youth ATVs at speeds under 25 mph. These children generally lack the cognitive skills to control adult ATVs under a wide range of conditions. Even many older, more experienced adolescents cannot make quick, accurate judgments while driving ATVs. A Y-12 ATV is designed to go up to 30 mph; however, Y-12 ATVs are equipped with a device that can limit the speed to 15 mph.