



# Inclusive Playgrounds Frequently Asked Questions



## What are the benefits of inclusive play and what does it have to do with public health?

People of all ages and abilities have an innate need to engage in playful activities as a part of healthy development. Studies suggest the importance of diverse forms of play throughout life, as play can be a key contributor to overall health and well-being.<sup>1</sup> Play offers social, emotional, cognitive, and physical benefits to public health, and directly assists with child development.<sup>2</sup> In 1929 Mildred Parten, a sociologist and researcher, developed the six stages of play for children ages 2 through 5:<sup>3,4</sup>

1. **Unoccupied play** is often seen in younger children and allows them to learn self-control, manipulating objects and materials, and often doesn't look like traditional play. Unoccupied play is important for the remaining five stages of play.
2. **Solitary play**, when children play alone, teaches independence. Younger children, ages two to three, often enjoy solitary play. This kind of play assists with building motor and cognitive skills.
3. **Onlooker play** is where children are observing other children playing. Onlooker play helps children learn how to interact with others and the world.

4. **Parallel play** is a transitional stage where children play alongside others but do not interact with other children. Parallel play often helps children transition from solitary and onlooker play to become comfortable with interacting with other children.

5. **Associative play** is the stage where children begin to socially interact with other children, however they are often not involved in the same activity.

6. **Cooperative play** is when children begin to play with one another as a group. Cooperative play is often seen with older children as it requires skills such as creativity, sharing, and conflict resolution.

Teens and adults also see some of these key benefits. Opportunities for play among teens and young adults improves overall stress management through adaptive coping strategies, while improving the brain, flexibility, and strength.<sup>5,6</sup>

Older adults can particularly benefit from play and active lifestyles. The public health of older adults can be improved through play by decreasing their chances of developing illnesses such as diabetes, cancer, and heart disease.<sup>5</sup> Providing opportunities for play through physical activity and socialization can be meaningful for older adults by supporting healthy aging.

Inclusive playground design is important as it provides opportunities for all people no matter their ability to be included in the stages of play.

<sup>1</sup> Ginsburg K. R. The importance of play in promoting healthy child development and maintaining strong parent-child bonds, *Pediatrics*, 2007, vol. 119 (pg.182-191) 10.1542/peds.2006-2697

<sup>2</sup> Blahey, Lori. (2021). The Power of Play: 6 Benefits for Child Development. <https://www.epl.ca/blogs/post/importance-of-play-for-kids/>

<sup>3</sup> Paper Pinecone. (2019). Understanding Mildred Parten's Social Behavior Theory of Play. <https://www.paperpinecone.com/blog/understanding-mildred-partens-social-behavior-theory-play>

<sup>4</sup> Rymanowicz, Kylie. (2015). The power of play – Part 1: Stages of play. [https://www.canr.msu.edu/news/the\\_power\\_of\\_play\\_part\\_1\\_stages\\_of\\_play#:~:text=Solitary%20play,solitary%20play%20is%20very%20normal](https://www.canr.msu.edu/news/the_power_of_play_part_1_stages_of_play#:~:text=Solitary%20play,solitary%20play%20is%20very%20normal).

<sup>5</sup> National Institute for Play. <https://www.nifplay.org/>

<sup>6</sup> Playworld. 3 Reasons Your Community Needs a Playground for Older Adults. <https://playworld.com/blog/reasons-your-community-needs-a-senior-citizen-playground/#:~:text=Physical%20exercise%20can%20benefit%20anyone,muscles%20and%20building%20core%20strength>

## What are inclusive playgrounds?

Over the past decade, more **accessible playgrounds** have been developed due to the 2010 Standards for Accessible Design which require new or altered playgrounds/play areas to have “at least one accessible route to each play component in a play area”.<sup>7</sup> Additionally, new or altered play areas must have at least one of each type of ground level play component that is accessible and 50% of elevated play components must be accessible.<sup>8</sup> For the full requirements to new playgrounds, or if you are altering an existing playground, refer to the [Guide to the ADA Accessibility Standards](#).<sup>9</sup> Accessible playgrounds allow people of all ages and those with physical disabilities to be able to access and use most of the play equipment; however, these kinds of playgrounds will not accommodate all disabilities.<sup>7</sup>

Beyond considering basic accessibility, **inclusive playgrounds** are universally designed, sensory-rich environments built for those who have physical disabilities, but also for those with varying intellectual

abilities and sensory needs, and provide rewarding play experience for all users.<sup>10</sup> Key characteristics can include levels of challenges, social spaces, calm areas, equipment zones, and sensory components that engage all the senses.<sup>7,10</sup> Inclusive playground design helps not only users, but also parents and caregivers who might have a disability. Ensuring that those with disabilities and their families are involved in design considerations and decision making is critical to designing inclusive playgrounds and decreases challenges that parents and caregivers may face when bringing their child to the playground.

## What design features should be considered for a playground?

When building a playground, there are a variety of elements and people to consider such as **surfacing, experiential design, and play for different ages and abilities**. See Table 1 below for information regarding surfacing.<sup>11,12,13</sup>

Table 1: Surfacing

Type	Description	Initial Cost	Maintenance Cost	ADA Compliant
Poured-in-place rubber (PIP)	<ul style="list-style-type: none"> <li>Highly shock-absorbing.</li> <li>Sustainable and long lasting.</li> <li>Variety of colors.</li> </ul>	High	Low	Yes
Modular tiles	<ul style="list-style-type: none"> <li>Similar to poured-in-place rubber but square shaped two by two foot tiles.</li> <li>Easy to install and maintain.</li> <li>Variety of colors.</li> </ul>	High	Low	Yes
Synthetic turf	<ul style="list-style-type: none"> <li>Artificial grass and rubber.</li> <li>Low lifetime cost.</li> <li>Padding must be placed underneath the turf to provide shock absorption.</li> </ul>	High	Medium	Yes
Engineered wood fiber	<ul style="list-style-type: none"> <li>Similar to wood chips.</li> <li>Loose-fill material, therefore will need to be refilled more often.</li> <li>Sustainable and long lasting.</li> <li>Decent shock-absorption.</li> </ul>	Low	Medium	Yes
Pea gravel	<ul style="list-style-type: none"> <li>Loose-fill material.</li> <li>Should not be used where fall heights are greater than five feet.</li> <li>Risks (choking hazard, low shock absorption) of pea gravel outweigh benefits.</li> </ul>	Low	Medium	No
Wood chips and mulch	<ul style="list-style-type: none"> <li>Loose-fill material, therefore will need to be refilled more often.</li> <li>Required to be filled nine inches (or greater) below ground level.</li> </ul>	Low	Medium	No

7 Discover Inclusive Playgrounds. <https://www.nchpad.org/fppics/Discover%20Inclusive%20Playgrounds%20Guidebook.pdf>

8 IPEMA. ADA checklist. <http://ipema.wpengine.com/wp-content/uploads/2017/05/ADA-Checklist-Reference.pdf>

9 U.S. Access Board. (2007). Guide to the ADA Accessibility Standards. <https://www.access-board.gov/ada/guides/chapter-10-play-areas/#application---where-do-the-play-area-guides-apply>

10 NCHPAD. Accessible & Inclusive Playgrounds. <https://www.nchpad.org/1616/6669/Discover~Inclusive~Playgrounds>

11 MRC Recreation. Playground Safety Surfacing 101 Which Surfacing is Best? <https://mrcrc.com/playground-safety-surfacing-guide>

12 Harper, TF. (2021). A Complete Guide to Playground Surfacing. <https://www.tfharper.com/a-complete-guide-to-playground-surfacing/>

13 Laufenberg, Theodore and Winandy, Jerrold. Field Performance Testing of Improved Engineered Wood Fiber Surfaces for Accessible Playground Areas. <https://www.access-board.gov/files/research/ewf-2003.pdf>





## Playground Design and Play Components

Playgrounds can have different types of experiential designs and play components to promote different types of development and inclusive play. For example, multi-sensory playgrounds can support brain development in relation to sensory systems.<sup>14</sup> Playgrounds that include more physical amenities such as climbing structure and ramps, can promote physical fitness.<sup>14</sup> It is important to have a combination of different kinds of designs to ensure that people of all ages and abilities are able to benefit from playgrounds. Different types of play components can also include swings, different types of slides, spinning and/or rocking play components, and elevated and ground play components.<sup>9</sup>

Teens and adults can also see public health benefits from being able to use playgrounds. Opportunities for intergenerational play can be designed to accommodate the physical and psychological needs of people across the age and ability spectrum while encouraging meaningful engagement between members of different age groups. This can be achieved through graduated challenges that invite members of all ages and abilities to test their ability to take risk. While the standard playground is designed with levels of challenges designated for ages 2 to 5 and 5 to 12,<sup>15</sup> adult or intergenerational playgrounds also provide play equipment that will allow adults to interact with children. Play equipment that encourages intergenerational play includes swings, custom slides, fitness equipment, climbing walls/nets, and obstacle courses.<sup>16</sup>

## What safety considerations and codes should be met?

Ensuring the safety of all users is essential. It is important to check with your city/village to understand any playground safety rules and regulations. There are numerous national safety guidelines and checklists that may prove to be helpful to understand where to find certified inspectors, what kinds of maintenance inspections to perform, and ADA standards.



Variety of swings.  
Credit: [North Charleston via Flickr](#)



Accessible playground.  
Credit: [North Charleston via Flickr](#)



Accessible surfacing and play structure. Credit: [Brisbane City Council via Flickr](#)



Accessible carousel and rubber softfall.  
Credit: [Brisbane City Council via Flickr](#)



Sensory panels.  
Credit: [Brisbane City Council via Flickr](#)



Playground spinner.  
Credit: [North Charleston via Flickr](#)

- The [National Recreation Park Association \(NRPA\)](#) provides guidelines, standards, certifications, and checklists, regarding playground safety.
  - [12 Point Playground Safety Checklist.](#)
  - [National Recreation and Park Association - Playgrounds.](#)
  - [Certified Playground Safety Inspector \(CPSI\):](#) The NRPA offers a certification program which allows those who complete the course to have a deep understanding of playground hazards, equipment specifications, and surfacing. CPSIs are often responsible for performing safety audits.<sup>15</sup>

<sup>14</sup> Kaplan, Mara. (2019). The Five Fundamental Strategies for Designing a Playground for All. <https://www.webuildfun.com/post-title>

<sup>15</sup> National Recreation Park Association. Certified Playground Safety Inspector (CPSI) Certification. <https://www.nrpa.org/certification/CPSI/>

<sup>16</sup> Playsi. Adult Fitness Playground. <https://www.playsi.com/en/playground-planning-tools/fitness-playground-design/adults/>



- ASTM International is an organization known for developing standards and guidelines,<sup>17</sup> and has technical manufacturing standards for playground equipment manufacturers.<sup>18</sup> Below are summaries of a few ASTM standards.
  - [Guide to Surfacing ASTM Standards for Public Playgrounds \(Safety First Playground Maintenance\).](#)
  - [Guidelines, Standards and Best Practices \(National Program for Playground Safety\).](#)
- [International Play Equipment Manufacturers Association \(IPEMA\)](#) provides an accessibility checklist for ADA standards and ASTM standards.<sup>8</sup>
- United States Consumer Product Safety Commission (CPSC) is known for issuing safety standards for products including playground products and equipment.<sup>18,19</sup>
  - [Public Playground Safety Handbook.](#)
  - [Public Playground Safety Checklist.](#)
- **Designer:** Who will design the layout? Look for designers who are aware of playground safety standards and inspections as well as inclusivity.
- **Equipment manufacturers:** What kinds of equipment will the playground have? Look for manufacturers with ASTM certifications.
- **Installer and surfacing installers:** What kind of surfacing will be installed and who will install it as well as the equipment?
- **Inspector:** Does your community have requirements for who should inspect the playground for compliance with current industry safety standards?
- **Funder:** By whom/how will the playground be funded? Some potential funders are listed below.

## What funds are available for building a playground?

When building a budget, it is important to build in installation and reoccurring maintenance fees. Funding for playgrounds can come from your local community, online sources, and foundations.

### Potential Funding Sources:

- [Playground Funding \(Playworld\).](#)
- [Playground Budgeting Example \(Kompan\).](#)
- [Playground Grant Process and Resources \(Landscape Structures\).](#)
- [NRPA Grant and Fundraising Resources.](#)
- [AARP Community Challenge.](#)
- [KABOOM! Grants.](#)
- [Army National Guard \(Volunteer Labor\).](#)

## Who might be involved in building a playground?

- **Community:** Where is the playground being built? Those who will use the playground, specifically those with disabilities, children, and families should be involved from the very beginning.
- **Owner:** Who owns the land that the playground will be built on? The owner should be sure to consult with their legal counsel to understand their liability and legal responsibilities.
- **Maintenance:** Who will maintain the playground? A Parks department, the city/village, and the maintenance crew should be involved early on to provide insight on their maintenance capabilities and needs.

## Where can I find out more?

- The Power of Play: 6 Benefits for Child Development. <https://www.epl.ca/blogs/post/importance-of-play-for-kids/>.
- National Institute for Play. <https://www.nifplay.org/>.
- MRC Recreation. Playground Safety Surfacing 101 Which Surfacing is Best? <https://mrcrec.com/playground-safety-surfacing-guide>.
- Playworld. Why Create an Inclusive Playground? <https://playworld.com/inclusive-play>.
- IPEMA. ADA checklist. <http://ipema.wpengine.com/wp-content/uploads/2017/05/ADA-Checklist-Reference.pdf>.
- Veerman, Marcus. 5 Steps for a better place to play. <https://www.playgroundideas.org/wp-content/uploads/5-step-Manual-.pdf>.

<sup>17</sup> ASTM International. What Is ASTM. <https://www.astm.org/about/overview/fact-sheet.html>

<sup>18</sup> NPPS. Guidelines, Standards and Best Practices. <https://playgroundsafety.org/safetm-resources/guidelines-standards-and-best-practices>

<sup>19</sup> United States Consumer Product Safety Commission. About CPSC. <https://www.cpsc.gov/About-CPSC>

