

Tips for Gardening with Special Needs Groups



Gardeners at Pure Joy of Mississippi in Clinton display their raised bed.

Individuals with disabilities can participate in many different gardening activities, including garden design and construction, germinating seeds, and growing and transplanting seedlings. They also can do maintenance activities like watering, planting, pruning, mulching, weeding, and harvesting. Gardening is a therapeutic and fun activity that can be rewarding regardless of age or physical or mental ability.

This publication can help Extension agents, Master Gardeners, and others develop educational gardening programs to meet the specific needs of clients with special needs. Special needs audiences include individuals with physical, mental, intellectual, developmental, sensory, behavioral, or emotional disabilities.

Benefits of Gardening

Gardening provides physical, mental, and social benefits. Some of these are listed here.

Physical Benefits

- Increases mobility, balance, and coordination, which may help maintain independence.
- Encourages use of macro and micro motor skills.
- Increases energy, endurance, strength, and muscle tone.
- Enhances cardiovascular health.

Mental Benefits

- Enhances learning skills.
- Improves mental focus.
- Improves spatial awareness.
- May help lessen depression.
- Improves self-esteem and builds confidence.
- May help overcome fear, anxiety, and stress.
- May help lower the risk of dementia.

Social Benefits

- Improves communication skills and provides opportunities for expression.
- Provides opportunities to make new friends.
- Encourages teamwork.



Participants in St. Richard Church's Special Kids Program in Jackson fill raised beds with potting mix.



Participants plant tomato seeds at St. Catherine's Village Memory Care Unit in Madison.

Mississippi Disability Statistics

The Centers for Disease Control and Prevention (CDC) defines a disability as any condition of the body or mind that makes it more difficult for the person with the condition to do certain activities and interact with the world around them.

According to the CDC, approximately 33 percent (767,000) of Mississippians 18 years and older have a disability. The CDC lists six types of functional disabilities and percentages of Mississippi adults with those disabilities. An individual may have more than one type of disability (for example, a person can have both mobility and cognitive disabilities).

- Mobility (17 percent): Serious difficulty with walking or climbing stairs, dexterity, or stamina.
- Cognitive (15 percent): Serious difficulty concentrating, remembering, or making decisions.
- Independent living (9 percent): Serious difficulty doing errands alone, such as going to the doctor.
- Hearing (8 percent): Deafness or serious difficulty hearing.

- Vision (7 percent): Blind or serious difficulty seeing, even when wearing glasses.
- Self-care (5 percent): Difficulty dressing, grooming, or performing day-to-day activities.

In addition to having one or more of the six functional disabilities, the CDC reports that adults with disabilities experience a higher frequency of physical and mental health issues, including depression, obesity, smoking, diabetes, and heart disease, as compared to individuals without disabilities.

Disability Inclusion

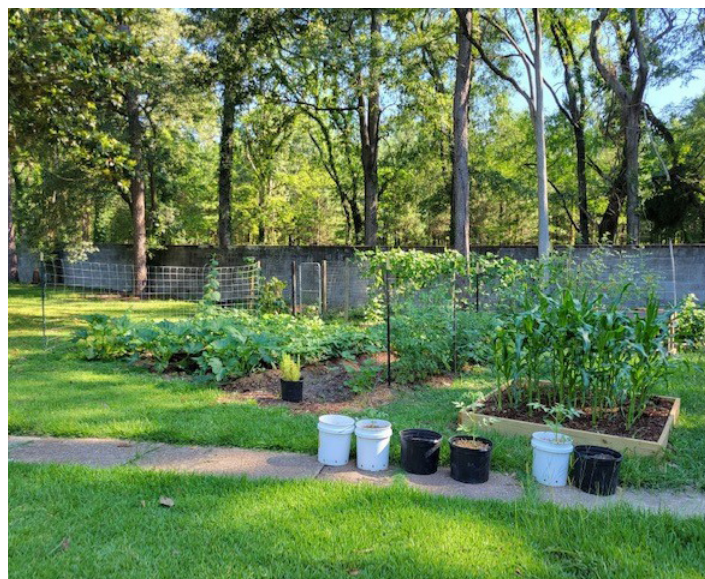
The CDC defines disability inclusion as making sure all individuals have the same opportunity to participate to the extent they desire and to the best of their abilities. When working with gardeners with disabilities, try to create an environment where these desires and abilities are encouraged.

Adaptive Teaching Style

When working with individuals with disabilities, you need to adapt your teaching style to meet their needs. While you should not ask about protected patient health information, you may ask the person in charge whether the participants are able to perform the planned gardening



Participants in the Mustard Seed program in Brandon modify an elevated gardening table.



Raised beds, trellises, and container gardens like these at Carmelite Monastery in Jackson work well for people with mobility issues.

activity or what modifications would allow them to participate. Some participants may require multiple teaching strategies to help overcome challenges.

Garden Accessibility

Gardens should be designed and constructed to accommodate a wide spectrum of physical and mental disabilities. Pathways should provide easy access within the garden and have no obstructions. They should be at least 3 feet wide to allow wheelchair accessibility. Thoroughly inspect pathways leading to and through the garden before each gardening event to identify and eliminate or reroute around any obstacles.

Whether designing a new garden or modifying an existing one, there are several issues to address and incorporate in the design process:

- overall physical health of the participants
- best garden type to accommodate the participants
- garden location
- water source
- space requirements
- soil texture
- availability of soil nutrients

Based on the participants' physical abilities, design a garden that will allow easy access. Raised beds, elevated tables, trellises, vertical gardens, and container gardens limit the amount of bending and provide safer access for those with mobility issues.

Consider planting a trial garden, sensory garden, pollinator garden, wildlife habitat garden, or hügelkultur garden. Each garden type has many instructional topics you can share with participants throughout the year.

Garden Safety

Safety concerns can arise when gardening and should be addressed before each gardening event to prevent harm or injury. Some safety concerns to consider are listed below.

Refreshments

As participants may have unknown allergies, volunteers should not provide any food or beverages. Refreshments normally are provided by the facility's staff, who are familiar with participants' food and beverage preferences and needs.

Weather Conditions

Follow the weather daily leading up to the event. If the outdoor portion of the day's activity must be canceled, plan a simple indoor gardening activity, and reschedule the outdoor event. In the summer, plan outdoor gardening activities during the morning hours when it is not as hot. Even then, conditions may be uncomfortable for some individuals.

To provide protection from the sun, participants should wear hats, sunglasses, long-sleeve shirts, pants, gloves, socks, shoes that cover the entire foot, and sunscreen. Encourage participants to take breaks and to drink water before, during, and after gardening activities.

Provide breaks from the sun and heat in shaded areas, with seating that is easily accessible and comfortable. This is also a time to socialize, relax from the gardening activities, or even take a brief nap.

Personal Hygiene

A major food safety hazard when touching or harvesting fresh produce is the introduction of human pathogens, which may cause disease or illness in humans. Three primary groups of pathogenic microorganisms of concern are bacteria, viruses, and human or animal parasites. To help prevent the spread of pathogens and parasites, make sure participants wash their hands before and after handling fruits and vegetables. Instruct participants not to touch their mouths when gardening. It is also wise to have ready access to restroom facilities.

Gardening Tools

Basic gardening equipment can easily be modified to assist people with different physical and mental disabilities. Sticky tape can increase grip. You can use soft string to attach a tool to a person's wrist so they can easily retrieve it if they drop it. Tool handles can be extended by attaching lightweight PVC pipe.

Before using any gardening tool, teach participants how to safely use it, especially sharp tools such as loppers, saws, pruners, and shovels. If participants are willing, they should wear gloves that grip surfaces to help prevent slipping and hand injuries. Try to use tools that are ergonomically designed, lightweight, and easy to handle. At the end of each gardening event, secure all gardening tools in a safe location away from foot traffic.

Pesticide Application

Consider adopting integrated pest management (IPM) protocols to control pest populations. This may not always be sufficient to control a large pest outbreak. In this case, use synthetic pesticides in conjunction with IPM techniques to reduce pest populations.

Before applying pesticides, notify the facility director and staff of the application date, time, location, product, restricted entry interval, and emergency medical contact information. Much of this information is located on the pesticide container label. Carefully read the entire pesticide label before purchasing and before each use. The best option may be to apply pesticides late in the day when no people will be in the garden for the remainder of that day. Follow all label precautions to protect everyone involved.

References

Centers for Disease Control and Prevention. Disability and Health U.S. State Profile Data for Mississippi (Adults 18+ years of age). <https://www.cdc.gov/ncbddd/disabilityandhealth/impacts/mississippi.html>



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