



the children. When a preschool child's behavior is automatic, it sets the stage for the child to have lifelong healthy habits.

The guiding principles provide a basis for setting up the environment and selecting strategies to promote children's learning.

---

### Environments and Materials

---

Children learn most effectively in a safe, inviting environment in which they can freely explore and challenge themselves. Health and safety in the preschool program, both indoors and outdoors, includes environment, supervision, and education. Environment is the first component of safety; a safe environment allows children to explore, play, and learn without unnecessary restriction. The environment should be set up and maintained to reduce the risk of injury and **disease transmission**.

Proper supervision of children is essential, and the required adult-to-child ratios must be met at all times, including periods when children play outdoors, are transported, and go on field trips.<sup>5</sup> The most effective supervision includes active involvement with children's learning: teachers move around the room with children, attend to children and their interactions, make eye contact, encourage children verbally, and model appropriate voice and actions.

Education is multifaceted. Teachers promote children's learning through discussion, modeling, and daily routines through active participation. An accessible and supportive environment with appropriate facilities and items allows children to practice and demonstrate progress in learning.

The following recommendations apply to establishing the preschool environment as related to the three health domain strands: Health Habits, Safety, and Nutrition.

► **Establish a physical learning environment designed for children's initiative.**

This promotes their self-esteem and builds their skills and confidence. Arrange rooms to allow visual supervision and ease of movement throughout the indoor space. Provide child-size furnishings and low shelves with a wide variety of developmentally appropriate materials, in labeled areas, for easy return after use. Easily accessible handwashing and toothbrushing facilities allow children to initiate health-promoting behaviors. Small and sturdy plates, cups, and pitchers, as well as easy-to-grasp (and, if needed, specially adapted) serving utensils, facilitate self-help skills during mealtimes.

► **Provide safe, inviting learning environments and appropriate supervision of children.**

When the environment is free of potential hazards, the staff spends less time saying no and more time in positive interaction with the children. Furthermore, if children are allowed to explore and investigate their environment without unnecessary risk of injury, they develop a sense of security and confidence.

► **Maintain a clean, healthy, and sanitary environment.**

Incorporate **cleaning** and **sanitizing** into the daily routine. Children can practice basic cleaning (e.g., wiping tables after eating, disposing of trash, sorting recyclable materials).

### Research Highlight

Cleaning and **disinfecting** is essential. Studies have shown that some **germs**, including influenza virus, can survive on surfaces for two to eight hours; rotavirus can survive up to 10 days. Cleaning with soap and water removes visible soil. After cleaning, disinfection (sanitizing) kills bacteria, viruses, and fungi (i.e., “germs”). The **Centers for Disease Control and Prevention (CDC)** states that a bleach and water solution of one tablespoon household bleach to one quart water is effective. Wet the surface with the solution and allow to air dry. Mix fresh bleach solution each day to maintain effectiveness, and store in a clearly labeled spray bottle out of children’s reach. Research shows that other chemicals (e.g., ammonia, vinegar, baking soda, Borax) are not effective against some bacteria.<sup>6</sup>

- ▶ **Have supplies available and accessible to promote routine health practices.** Appropriate handwashing requires a sink with running water, liquid soap, paper towels, and a hands-free trash can, all within children’s



reach and readily accessible to children throughout the day. Supplies for toothbrushing include a water source and rinsing receptacle; child-sized, soft-bristle toothbrushes labeled with each child’s name; toothpaste (ideally, approved by the American Dental Association); disposable cups for rinsing; and a storage container that allows toothbrushes to stand upright to air dry alone.<sup>7</sup> If appropriate facilities are not available in the classroom, then provide opportunities throughout the day for children to visit the sinks, with adult supervision.

- ▶ **Provide stimulating and developmentally appropriate materials in interest areas for children’s use during dramatic play.**

Materials may create awareness for one child while allowing another child to apply prior learning. Add health-related items that are familiar to children (e.g., empty containers from soap, bath, hair care, oral **hygiene**, and sunscreen products), and health-themed pictures, books, puzzles, and other materials to manipulative, block, and library interest areas. Children can imitate teachers’ cleaning practices by including disposable gloves, spray bottles of clean water, and clean rags in interest areas. Clean, empty food containers, restaurant menus, and food models enhance nutrition education. Select items that would be familiar to the families in your program, or ask families to send in clean, empty containers from home with labels written in their home language. Special-interest areas (e.g., doctor’s office, dentist’s office, market, and grocery store) can be occasionally introduced. Children also learn through pretend play with protective equipment, such as



gloves, hard hats, bike helmets, knee pads, eye-protection goggles, ear protection, pot holders, and sports safety gear. A variety of real, unconnected telephones, cell phones (with batteries removed), and model pay phones can help children practice dialing 911. Adding car seats and seat belts (available from car salvage businesses) for children to practice with and use in the dramatic play area enhances small-muscle development while reinforcing the importance of “buckling up.” Additionally, car seats can be provided for “buckling up” dolls. Belts, backpacks, shoes, and other materials with buckles encourage buckle practice. If there are children with special health care needs, it may be appropriate to include items that are part of their lives (e.g., a mask to give a stuffed animal “asthma treatment,” a doll-sized wheelchair for children to use in play).

► **Provide furnishings and utensils appropriate for children’s size and abilities.**

Child-sized tables and chairs let preschool children easily reach the table while sitting comfortably with feet touching the floor. Small and sturdy trays, plates, and cups make it easier for children to grasp, lift, and carry. There are a variety of utensils available with larger grip handles or bent angles to support children who do not yet turn their wrist. Handwashing sinks should be child-sized; if not, provide sturdy, wide-based step stools with a nonslip base and top. Teachers may consult an early childhood special education teacher or other specialist for guidance in selecting items appropriate for children with special physical needs.



► **Be creative and include a gardening space, either indoors or outdoors, where children can plant seeds, tend the garden, and watch the plants grow.**

It is helpful for preschoolers to understand where foods come from; foods do not just “appear” in a grocery store or farmers market. Gardening activities are one way to help children learn about food production.<sup>8</sup> Plant fast-growing plants such as leaf lettuce, radishes, and herbs; these can easily be grown in pots in the preschool setting. Outdoor garden areas should be free of natural hazards such as insects that bite or sting or animal waste.

## Summary of the Health Foundations

The preschool health foundations describe the health knowledge, skills, and behaviors that preschool children typically develop in a quality preschool