

DOMAIN 2: MOTOR DEVELOPMENT, PHYSICAL WELL-BEING, AND HEALTH

INTRODUCTION

During the first years of life, the human body changes continuously and dramatically. These changes are not simply a matter of growing taller or gaining more weight; they also involve a complex series of changes in body composition, proportion, and motor development. Long acknowledged as cornerstones of early development and learning and as key dimensions of school readiness, children's physical well-being, health, and motor development have received substantial attention in medical, educational, and developmental literature.

Through an interaction of maturation and experience, physical and motor development occurs along a relatively predictable sequence from simple to complex. Three general principles underlie the acquisition of motor skills:

- Children develop motor control and coordination sequentially from head to toe.
- Children develop motor control and coordination from the center of their bodies outward.
- Children develop motor skills involving reflexes, then large muscles, and then progress to smaller muscles. The order in which these develop is virtually the same for children around the world (e.g. they learn to lift their heads before they learn to control their fingers).

RATIONALE

Motor development, physical well-being, and health are central to children's learning experiences and are building blocks to lifelong health and active lifestyles. Motor development is closely linked with children's overall development. For example:

- Language development (babbling, pointing to objects);
- Cognition (exploring new environments, crawling or stooping down to explore, and building with blocks);
- Social competencies (hugging, building block structures together, waving bye-bye, and sharing a tricycle ride);
- Emotional development (successful balancing, using a climber, or throwing and catching balls).

The development of young children's physical and motor skills is often uneven. Growth spurts in physical development are common.

NOTE: Supplemental materials for parents, child care providers, teachers, and policy makers provide examples.

Children's physical development is influenced by external factors such as adequate nutrition, accessibility to safe play environments, and access to health and dental care. Social and environmental risks (e.g. firearms, lead, pesticides, inadequate or unhealthy water supplies, violent homes and neighborhoods, and water safety) impact children's physical well-being.

GENERAL DEFINITION

Domain 2: Motor Development, Physical Well-Being, and Health include three sub-domains:

- Motor Development
 - *Gross motor skills*
 - *Fine motor skills*
 - *Sensorimotor skills*
- Physical Well-Being
- Health
 - *Personal Care*
 - *Nutrition and Feeding*
 - *Safety*

MOTOR DEVELOPMENT

Motor development has three distinct components: gross motor skills, fine motor skills, and sensorimotor skills.

Gross motor skills are characterized by movements of the large muscles of the body and include such movements as rolling over, walking, jumping, and climbing.

Fine motor skills involve the ability to coordinate smaller muscles of the hands, fingers, and face that allow for movements such as grasping, cutting, picking up food, or intentionally winking.

Sensorimotor skills involve the ability to use and integrate the senses (sight, hearing, smell, taste, and touch) in relation to motor activity.

These skills provide a foundation for behavior, learning, and overall development for young children.

PHYSICAL WELL-BEING

Children need free play time, structured and unstructured physical play opportunities, adequate space, and challenging materials to pursue their physical development needs. Physical competence allows children to participate in group activities, to maintain attention, to maintain healthy bodies, and to have the energy to participate in learning.

Elements of physical competency and development include:

- Energy
- Strength
- Flexibility
- Coordination
- Stamina and Endurance

HEALTH

Personal Care: Prenatal care, personal hygiene, and basic personal care are essential to a child's physical health. Children's physical health is impacted by access to medical and dental care, adequate nutrition, healthy sleep patterns, and opportunity for physical activity and active play. Recognizing and addressing acute and chronic illness is essential to sustain healthy physical development.

Nutrition and Feeding: Eating a variety of nutritious foods is necessary for a child to grow and develop well. This includes what the child eats, as well as all the things a child learns about food and eating. Attitudes, self-regulation, culture, and developing competence in feeding oneself are entwined with food and feeding.

Safety: Young children's physical well-being is dependent on adult-provided support and monitoring. Safety includes protecting children from exposure to harmful substances and situations and helping children learn to avoid harmful objects, environments, and circumstances. Though young children can learn safety rules and regulations, know when and how to ask for help, and recognize the boundary between safety and danger, they cannot be expected to keep themselves safe.

SUPPORTING INDIVIDUAL DIFFERENCES

Physical and motor development includes biological maturation that reflects genetics, nutrition, health, and environments. Development of physical skills and abilities follows a predictable progression, though the rate of physical and motor development varies widely among individuals, cultures, and contexts.

Children's motor development, physical well-being, and health are sometimes impacted by visual, hearing, motor, neurological, and disease or health conditions. Young children who experience delays, disabilities, or who are at risk for developmental delays can benefit from assistive technology and adaptive equipment, and specialized resources where space, play settings, and trained adults support daily activities.