



Health Habits

learning is progressive, and preschool teaching often focuses on scripts and routines for prevention of disease and injury. Later, as children grow and develop knowledge and skills, they begin to believe and understand that they are responsible for their own health.

The Health Habits strand includes the following substrands: Basic Hygiene, Oral Health, Knowledge of Wellness, and Sun Safety. The following section introduces and recommends strategies to support learning related to the specific substrands.

Teacher-guided activities on health habits may be used to introduce or focus attention on a specific topic or concept. However, learning is primarily achieved through children's daily routines (e.g., washing hands at certain times, brushing

teeth after meals) and verbal or nonverbal scripts that illustrate the desired lifelong behavior (e.g., using tissue when blowing the nose, coughing into elbows). Children demonstrate knowledge of body parts, disease prevention, and wellness as they practice routines and develop descriptive scripts (e.g., "We wash our hands, fingers, and wrists"; "I'm going to brush my teeth and tongue"); they begin to understand more difficult concepts through scaffolding.

VIGNETTE

Brianna and her dad arrive at preschool. As they enter the classroom, Mr. Moore says, "Good morning, Brianna. I'm happy to see you!" Brianna places her bag in her cubby and then begins to play with her friend, Carlos. Mr. Moore turns to her dad and says, "Good morning, Mr. Manning. Brianna looks like she slept well last night. Has she had any recent asthma episodes?" Mr. Moore knows that Brianna has had several severe asthma episodes, so it is important that he communicate regularly with Brianna's family. Both the teacher and family share information each day so that potential health issues or asthma triggers can be avoided.

PLANNING LEARNING OPPORTUNITIES

Health education is integrated in the daily schedule and begins as the teacher greets and welcomes each child to the program. As the children arrive, the teacher can note each child's health and appearance; if family members are present, briefly ask for information that may be important to care for the child that day. Throughout the day, routines are established to allow children to interact with each other and materials, eat **nutritious foods**, brush teeth, wash hands, be physically active, and relax and rest as needed.

1.0 Basic Hygiene

roviding a clean and healthy physical environment is essential for the prevention and control of diseases in preschool programs. A second defense against disease transmission is helping children develop basic hygiene habits. For preschoolers, the objective is to understand that health habits help to prevent disease and promote healthy bodies. Preschool children will not understand how diseases are spread (e.g., through direct contact, airborne pathogens, and food and beverages), and the concept of invisible germs is usually beyond their comprehension. Children require repeated hands-on experiences and conversations about invisible germs in order to comprehend this concept. It is not appropriate to discuss specific diseases because this knowledge may be frightening or confusing.

Children can develop the skills needed to perform routines (e.g., handwashing, toothbrushing, coughing into elbow) and disease-prevention behaviors (e.g., use of tissue to blow nose, proper disposal of tissue), and they may mimic scripts, demonstrating "Germs cause disease" and "Don't share germs." Language scripts in both English and the child's home language (including sign language), along with daily routines, help health behaviors become internalized for preschool children and establish a basis for lifelong healthy habits. Combining pictures with the spoken home language is also very helpful. An example of a handwashing poster that is available in English, Spanish, or both languages can be downloaded at http://www.childhealthonline.org/downloadform.html.9

Handwashing is the most effective way to prevent **communicable disease**. Children learn as they explore the

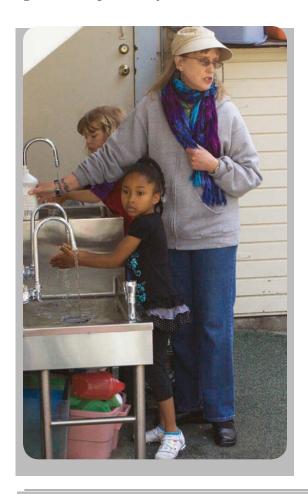
environment with their hands, play in dirt and sand, and touch the hands of other children. Hands come in contact with bacteria and other organisms, some of which may cause disease. Frequent and proper handwashing removes most harmful germs before they spread to children's mouths, noses, and eyes or to other people. ¹⁰ Through modeling and gentle coaching, teachers remind children to wash their hands thoroughly and frequently throughout the day.

Adults can demonstrate personal hygiene routines and promote disease-prevention actions by teaching children to cough into their elbows and use a tissue to clean their noses. Family-style eating (i.e., self-serve from common serving bowls) provides an opportunity for teachers to discuss sharing, manners, and program practices along with germ prevention.

Research Highlight

The Centers for Disease Control and Prevention (CDC) recommends washing with soap and warm water, lathering for 15-20 seconds. If soap and water are not available, alcohol-based hand sanitizers are effective in killing germs. These products do not replace regular handwashing with soap and running water; however, they can be used as an alternative when water is not readily available. If hand sanitizers are used, follow the manufacturer's instructions for use and supervise each child's use of the product. Such products are potentially toxic and must be stored away from children's reach.11 The CDC recommends using products that contain at least 60 percent alcohol.12

Teachers model disease prevention by following **standard precautions** (e.g., handwashing, wearing gloves, disposing of contaminated first-aid supplies). These guidelines (previously called **universal**



precautions) were initially intended to reduce the spread of infection to **health care providers** and to other patients. The recommendations were expanded and renamed "standard precautions." See the following Research Highlight for more information.

Research Highlight

"Universal precautions," as defined by the CDC, were designed to prevent transmission of blood-borne pathogens¹³ (e.g., hepatitis B, HIV) when providing first aid or health care.13 In 1996, the recommendations were expanded and renamed "standard precautions." They are still primarily designed to prevent the spread of bloodborne diseases, but they also are an excellent way to reduce the spread of infectious diseases in places other than health care settings, such as child care facilities and schools. It is important to recognize that children with infectious diseases are often contagious before they appear to be sick or are aware that they are ill. Therefore, preschool teachers should follow this application of the CDC's standard precautions to prevent the spread of infectious diseases. 14, 15, 16

VIGNETTE

The children are playing indoors when Miss Marie reminds them that it is time to prepare for lunch. She begins to sing a handwashing song as children leave their interest areas. Some of the children begin singing as they wash their hands. The song follows the familiar "Row, Row, Row Your Boat" tune, and the children enjoy singing it in both English and Spanish.

Wash, wash, wash my hands Make them nice and clean Rub the bottoms and the tops And fingers in between Lava, Lava, Lava mis manos Lavalas muy limpias Lavalas de arriba y abajo y Entre mis dedos de las manos¹⁷

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The children have learned that if they sing the song two times while washing their hands, then their hands should be clean! Miss Marie sings along with the children as she observes the handwashing process. She helps Tonya, who has a hearing impairment, by clapping along with the song; Tonya can look in the mirror above the sink to see when the song (clapping) ends. The younger children sometimes need help in dispensing the soap and turning the water on and off; the older children enjoy helping the younger ones and like to model their handwashing skills.

PLANNING LEARNING OPPORTUNITIES

Thorough handwashing requires that children apply soap and water and rub their hands for at least 20 seconds. Children can "time" their handwashing by singing a short song such as "Happy Birthday" or "Row, Row, Row Your Boat" twice before rinsing. Handwashing songs are available from several online resources (e.g., Henry the Hand, Scrub Club, Clean Hand Coalition). See the "Teacher Resources" on page 278 for more information. As teachers model handwashing, they encourage children to mimic the actions; rub the soap to form a lather; and see the running water send the soap bubbles, along with dirt and germs, down the drain.

Interactions and Strategies

Teach children how to wash hands.

Developing proper handwashing skills and behavior is a process. There are several steps: (1) wet hands and apply soap to make lather, (2) rub over and under hands and between fingers for at least 20 seconds, (3) rinse hands under running water, (4) use a paper towel or air dryer to dry hands, (5) turn off the faucet using the paper towel, and (6) dispose of the used paper towel. ¹⁸ Model and assist children through each step. Children will need modeling, coaching, and reminders as they develop the skills.

Model basic hygiene and disease-prevention actions throughout the day. In addition to handwashing, teachers can demonstrate the use of disposable

tissue when blowing the nose; and assist children as they learn to use a tissue, blow properly, and dispose of the tissue in a hands-free trash can. When sneezing, children turn the head into the elbow to prevent the spread of airborne germs. Encourage children to practice sneezing into their own elbows through games and activities (e.g., Simon Says, Follow the Leader). Discuss and model other health habits as opportunities arise, such as using a napkin while eating, dispensing toothpaste, and explaining why serving utensils are used, instead of fingers, to serve food.

Remind children about health practices throughout the day. Strategically place laminated posters, which can be wiped and sanitized, near the handwashing sink to remind children of handwashing steps. Posters may have pictures

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and simple words in both English and the children's home languages to clearly illustrate the steps of handwashing (e.g., Handwashing poster, Scrub Club). See "Teacher Resources" on page 278 for more information. Provide disposable tissues in accessible places in children's play areas.

Incorporate handwashing and other health practices in the daily rou-

tine. Preschoolers feel comfortable and secure with familiar, consistent routines. Through daily exposure and routines, children begin to recognize that health is part of their life and personal responsibility. Encourage parents to help children wash their hands when they arrive at preschool. Remind children to wash their hands throughout the day: on arrival; before and after eating or handling food; after toileting; after coughing, sneezing, or blowing their noses; before and after water play or sand play; after handling pets; and any time hands appear dirty. Incorporate handwashing into the daily routine, and remind children to wash hands at other times, as needed.

Use visual aids to demonstrate invisible germs. Preschool children can understand visible dirt, but the concept of germs that are too small to see (i.e., invisible) is beyond their comprehension. Introduce the term invisible. Demonstrate that something is there, but they cannot see it. Put a tiny dot on a piece of paper and post it on the wall. Have children stand at the opposite side of the room and tell you if they can see the dot. Have them move closer until they can see the dot; explain that the dot is there, but it is so small they could not see it from across the room. Products such as Glogerm¹⁹ can be applied to hands; it is invisible until hands are held under a special light. Spray lemon juice on white paper;

the drops disappear as the paper dries. When the paper is warmed, the droplets will become more visible. Help children imagine what germs look like; draw pictures or read books such as *Those Mean Nasty Dirty Downright Disgusting but . . . Invisible Germs.* Make sure to include children with visual impairments in the discussion of the concept of invisible germs.

Reinforce learning with stories and music. Teach short (i.e., 20-second) songs about handwashing and include music tapes or CDs in the interest areas. Play or sing songs in both English and the children's home languages to remind children of routine hand-washing times. Read books or tell stories about preventing the spread of germs through proper handwashing, covering a cough, sneezing into the elbow, and using disposable tissue when blowing noses. See "Teacher Resources" on page 278 for more information

Observe individual children atten-

tively. Each child enters preschool with different levels of experience, knowledge, skill, and ability. Through observation, teachers can determine where children are in the learning process. Anecdotal notes may also be helpful in determining a child's progress and identifying skills or behaviors that may need additional coaching and reinforcement. Use modeling, coaching, planned learning activities, and teachable moments to promote the development of health skills and positive behaviors. Provide both individualized and group activities to develop healthy habits, including adaptations for children with special needs. For resources for working with children with disabilities or other special needs, see the California Preschool Curriculum Framework, Volume 1, appendix D.

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2.0 Oral Health

Thildren's **primary teeth** (i.e., "baby teeth") are important not only for chewing food, but also to help with speech, to keep space in the jaw for adult teeth, and to provide structural support for facial muscles.²² The role of preschool teachers includes helping children build toothbrushing skills and form the foundation for lifelong habits. Through daily routines, practice, and modeling, children will learn when and how to brush their teeth. Oral health education is further promoted and reinforced through family education and community partnerships; teachers can provide information to families on how to use free or low-cost dental services in the community.

Early childhood **caries** (i.e., tooth decay) is the most common chronic childhood disease in the United States.²³ The best way to prevent **cavities** and other dental problems is to thoroughly brush and clean between the teeth at least twice each day. For children in preschool, this may mean brushing after breakfast or lunch with the teacher and then brushing

with family members at home before bedtime. For some children, the preschool routine may be the *only* time they brush their teeth. For example, some families are under tight schedules and may not place a priority on brushing teeth. Teachers may encourage adult family members to brush their own teeth with their preschool child and provide families with information about dental health services. If brushing is not possible, teachers can provide disposable cups and encourage children to "swish and spit" with plain water to help rinse food off teeth.



VIGNETTE

"Bihn is nervous about his visit to the dentist," Mrs. Phan confides to Ms. Morales, Bihn's teacher. "The dental visit is a new experience for him," says Ms. Morales, "and a lot of children are afraid of new situations. Several children have scheduled visits, so I have activities to help children prepare for going to the dentist. This week, we will talk about tooth care and what to expect at the dentist's office. The children will use mirrors to look inside their own mouths. They will also practice opening their mouths really wide. I will send home activities that you can do at home with Bihn. Please let me know of other ideas or activities that you have. We are reading books about teeth and the dentist; you can borrow these if you would like. If you have other books or stories that the children would enjoy, I would like to see them."



TEACHABLE MOMENT



Teachers may include discussion and dramatic play about dental visits when introducing children to oral health. They describe the dentist as a **health helper** who assists people in keeping teeth healthy. Introduce new terms when explaining simple procedures (e.g., proper brushing and flossing) and instruments generally used in a dental office (e.g., small mirror, tooth cleaner, dental probe, and dental floss). Teachers may read stories about visiting the dentist. They encourage parents to talk with their children about the dental visit in a positive manner; explain how dental staff can help them have strong teeth; and share stories about how a dentist has helped them.

Interactions and Strategies

Practice toothbrushing skills. Tooth-brushing requires several separate skills, including putting toothpaste on the brush, brushing each tooth, brushing the tongue, and rinsing the mouth. Introduce these skills by practicing dry brushing during small-group time. Read stories and show pictures of the separate steps of toothbrushing. Let children practice on a doll or other model (e.g., a toy alligator with lots of teeth). Practice "swish and spit" with plain water and a proper spit receptacle (e.g., trash can); this activity may be practiced outdoors for less mess and more fun!



Include toothbrushing in the daily routine. Provide a child-sized, soft-bristle toothbrush for each child, labeled with his or her name. Only a tiny smear of toothpaste is recommended; talk with children about preventing the spread of germs as you distribute toothpaste on wax-paper squares or on the side of small paper cups for each child. Assist children as needed: children with special needs may require adaptive equipment such as special toothbrushes. A child with visual impairment may be unable to see the toothpaste or judge the amount, so teachers may encourage the child to feel the amount of toothpaste with her tongue before she begins to brush. For resources for working with children with disabilities or other special needs, see the California Preschool Curriculum Framework, Volume 1, appendix D. Observe and gently coach children as they brush teeth and spit out excess toothpaste. Rinsing is not required but may be desired; prevent the spread of germs by using disposable cups to rinse. Display laminated posters (that can be wiped and sanitized) to remind children to brush their teeth; posters may have both pictures and simple words in English and in the children's home languages.

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Integrate oral health and nutrition education through cooking activities.

Some foods stick to teeth more than others. The sugar in hard candy or dried, processed fruit snacks stays on teeth longer than the sugar in chocolate bars or cake. Encourage children to explore sticky items such as glue, hair gel, tape, or stickers.24 Invite children to touch different items and describe how each feels. While children wash their hands, ask which substances are easiest and which are hardest to wash off. Build on this experience as you explain that some foods are sticky and stay on the teeth. Use cooking activities to help children identify and categorize foods by "stickiness"; have children cut through various foods with table knives to see which foods stick to the knives.

Incorporate music. Thorough toothbrushing takes about two minutes. One way to help children brush completely is to "time" the brushing by having other children sing a song while their classmates brush. During small-group time, combine music and movement with songs and physical activities such as the "Toothbrush Wiggle." ²⁵

(Sung to the tune of "The Hokey Pokey")

You put your toothbrush in, you put your toothbrush out
In-out in-out brush it all about
First you do the front, then you do the sides

Then spit the toothpaste out

Oh brush your teeth in circles Oh brush your teeth in circles Oh brush your teeth in circles Then spit the toothpaste out²⁶

Build communication and vocabulary **skills.** Read a story in the child's home language or encourage children to draw a story about going to the dentist. Introduce dental vocabulary, such as dentist, *fluoride*, cavity, gums, tartar, enamel, floss, and X-ray in English and the children's home languages. Provide a bulletin-board display with pictures and terms; include children's artwork or photographs of children in the display. Invite a dentist or dental hygienist to talk with children; encourage children to ask questions and invite parents to attend. For more information about strategies to support children who are English learners, see the California Preschool Curriculum Framework, Volume 1, chapter 5.

Encourage pretend play. One way to alleviate fear of the dentist's office is to establish a pretend dental office in the dramatic play area. Dramatic play allows children to try a variety of roles and occupations.²⁷ Depending on the space, you may be able to have both a waiting room and a dentist's office. Look for props that are safe and developmentally appropriate, such as unbreakable mirrors, oversized play toothbrushes, large models of teeth, dental health posters, flashlights, gloves, scrubs, masks and goggles, play money and receipt books, clipboards, bibs, dental X-rays, dolls, and magazines for the waiting room. Encourage children to assume different roles as dentist, dental hygienist, and patient. They may also play the role of a family member (i.e., parent or other adult caregiver), bringing in a doll, stuffed animal, or another child for a dental appointment.

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3.0 Knowledge of Wellness

hildren are naturally curious about their body parts, especially external body parts that are visible. Often, preschool health education begins with a unit on the five senses—sight, smell, hearing, taste, and touch—and the body parts associated with each sense. The five senses are incorporated in all learning activities during preschool. For example, if a food looks good and smells good, most children will want to taste it. The senses are integrated into all domains, such as math (e.g., "How many apples do you see? Which apple is bigger?"); science (e.g., "How does fresh bread smell?" "How does the color change after the bread is toasted?" "How does it feel on your tongue after the bread is toasted?"); and language (e.g., "Let's read a story about visiting the dentist.")

The five senses provide an introduction to how body parts work. Children can recognize the external body parts (e.g., eyes, ears, nose, tongue, fingers) and, through hands-on activities, can associate those parts with specific functions. Children can also explore how these body parts work together. For example, a food activity or snack with crispy rice cereal and milk allows children to see the food, touch it to compare dry cereal with wet milk, hear the cereal crackle when the milk is added, and smell and taste the cereal both with and without milk.

The concept of **internal body parts** is more difficult for preschoolers to understand. Teachers may begin with the mouth and tongue. Children looking in a mirror can see their faces and lips; when they open their mouth, they see the tongue and teeth. Children with visual impairments can be encouraged to feel the tongue and teeth. This introduces the concept that there are body parts that

are not easily seen. Teachers can reinforce the concept of both internal and visible body parts by inviting children to welcome themselves to school by way of greeting their body parts during circle time (e.g., "Good morning, heart," "Hello, fingers"). Preschool teachers can introduce specific body parts, one at a time, based on children's previous learning and experiences. Most children have experienced a cut or scratch, so they can understand that there is blood inside their body. Older preschoolers can be introduced to the idea that there is a heart inside their body. Appropriate hands-on activities (e.g., feeling their heart beat after a movement activity, listening through a stethoscope) help children understand that their heart pumps blood.

Preschoolers can begin to understand that bones provide a frame for the body and help them move. A variety of activities may be used to introduce children to bones, such as feeling bones in their own bodies (e.g., kneecap), looking at and touching the bones after eating chicken, and showing and explaining how X-rays are pictures of the inside of the body.

Older preschoolers may begin to learn that they have muscles under their skin



and that muscles also help them move. They can see the difference in muscles by comparing their own bodies to the bodies of older siblings or adults. Keep concepts simple; it is enough for children to learn that they have internal body parts, such as bones and muscles, and that these body parts have specific functions. As children learn about their own bodies, they will build on this information to understand and learn about other concepts presented in the primary grades.

Encourage children to tell an adult when they are hurting. If a child expresses, "I don't feel good," it is helpful to know if it is his or her head, stomach, or extremities (e.g., arms, legs) that hurt. Learning about body parts will enable children to communicate specific information about what hurts. Children may communicate by verbalizing (e.g., "My stomach/tummy hurts") or by pointing to the affected area of their bodies (e.g., "My knee is bleeding").

VIGNETTE

Mrs. Chang saw Tommy fall while he was playing on the balance board. Mrs. Chang immediately knelt by Tommy and asked him if he was hurt. Tommy did not cry or complain of pain when asked, but Mrs. Chang noticed that he continued to hold his right arm close to his body as they reentered the room. She continued to observe him during naptime; he did not appear to be in pain. She completed an injury/incident form, noting all the details, and contacted his family to share details of the fall. When Tommy's grandfather came to pick him up, Mrs. Chang recommended that he consult with Tommy's doctor and provided the center phone number in case the doctor needed additional information. The next day, Tommy returned to preschool with his arm in a bright blue cast.

TEACHABLE MOMENT



The next day, Mrs. Chang encouraged Tommy to tell the other children about his cast. Then the children identified people they could talk to if they were hurt or sick, such as a family member, guardian, or teacher. They discussed how doctors, dentists, and other health helpers can help them stay healthy, as well as take care of them when they are sick or hurt.

It is important that teachers observe children for changes in behavior or actions. There are several reasons why a child may not communicate physical discomfort to adults. Some young children may not recognize pain or think pain is "normal"; as a result, they may not cry even though the injury or illness may be severe. Other children may be afraid to cry or demonstrate pain or injury. They may not verbalize discomfort because of fear of doctors, nurses, or hospitals. A goal of preschool health education is to help children become familiar with health helpers and learn to communicate their feelings and questions.



Some preschool children easily understand why they go to a health helper (i.e., doctor, nurse, clinician) when they are sick. It is important that preschool children also recognize that health helpers help them grow up to be strong and healthy. Likewise, they may have difficulty understanding that medicine can also be used to prevent illness. For example, a preschooler may question why he needs a vaccination when he is "not sick."

As young children develop, they begin to make more choices that affect their health and well-being. Since much of their early behavior is monitored by adults, children often are unsure or unaware of the choices they have. Teachers should respect and be open to family beliefs, customs, and cultural practices—which may vary greatly—regarding when and what type of medical attention to seek. Access to money and health resources also influences decisions about health care and health products. These same factors influence the messages given to children and the choices they will be allowed to make. Recognize that



each family has the right to make their own health decisions. While being respectful and open to families, teachers in the preschool setting need to support families' practices that agree with guidelines from the American Academy of Pediatrics, promote positive health for all children in the group, and make sure potentially harmful practices are avoided. Work with families to identify and support the individual needs of each child.

Interactions and Strategies

Encourage children to explore and accept differences. Children can recognize physical differences (e.g., children who use braces, wheelchairs, glasses, or hearing aids; height, weight, and color of skin or hair). Children with disabilities may take medication or breathing treatments during the day, eat in a different way (e.g., through tube feeding), or need other supports to assist them in daily activities. Likewise, there are differences in families' health care practices, meal setup and food choices, and safety considerations. For resources for working with children with disabilities or other special needs, see the California Preschool Curriculum Framework, Volume 1, appendix D.

Use correct terminology throughout **the day.** Children will learn appropriate terminology about body parts through daily usage and practice; include terms in both English and the children's home languages. Handwashing terms include hands, fingers, skin, fingernails, and wrists. Games such as Simon Says or Follow the Leader incorporate body parts (e.g., "Wiggle your nose" or "Jump with your legs"). Start with simple body parts that children recognize; as children develop knowledge and understanding, teachers can demonstrate how to "feel

your heart" or "flex your arm muscles." Model appropriate terminology as situations arise (e.g., when children have scratches or scrapes). Identify the affected body part by the appropriate term and describe the injury. For example, say "You scraped your elbow" rather than "You have a boo-boo."

Familiarize children with health **helpers.** When gathering materials or planning field trips and guest speakers, include health helpers from many specialties (e.g., lab technicians, paramedics, fitness specialists, nutritionists, dentists, eye doctors). Consider types of medical specialists who might be less familiar (e.g., chiropractors, acupuncturists, and midwives) and that are utilized by families in your community. Provide information that interests the children, such as tools used by health helpers, places where they work (e.g., doctor's office, school, hospital, fitness center, portable dental trailer), and how they help children stay healthy. Health screening can be a positive way for children to meet health helpers; prepare children in advance and practice specific activities such as opening their mouths as wide as possible (i.e., dental screening) or pointing up, down, right, and left (i.e., vision screening with E chart). As children explore the roles of health helpers and hear about what they do, begin to describe occasions when specific health help might be needed. Allow ample time for children to process, role-play, and ask

Establish special interest areas. Books and pictures can show a variety of health helpers from diverse backgrounds and in different settings. Dress-up clothes and props for role playing (e.g., nurse, doctor, fitness instructor) enhance dramatic play. Design special health-helper interest areas, such as a medical doctor office,



dentist office, eye doctor office, or store that sells health products. Many children have pets, so the concept of health helpers can be expanded to include veterinarians as children pretend-play with toy animal figures. Engage with preschool children as they work out their questions through dramatic play.

Integrate health promotion with other domains. Provide clean, empty containers for shampoo, toothpaste, sunscreen, and other health-related items for children to use in dramatic play. Avoid using containers that previously held medications, cleaning products, cosmetics (e.g., nail polish remover), or other potentially toxic substances that children should not handle. Use health-product coupons and flyers with pictures to create table games; children can examine the coupons and match them to product containers. Containers can also be used to make puzzles or lotto games to help children recognize letters and words. Provide product containers for children to use in making

questions.



collages or paintings, or add to the block area for children to haul in toy trucks. Matching container lids to the containers promotes fine motor skills as well as eyehand coordination. Encourage children to sort and categorize items. Provide a variety of items that represent the diversity of products used by families (e.g., bar soap, liquid soap, body wash) and show packaging and advertisements printed in various languages. Promote language development by reading books aloud and singing songs about wellness in English and the child's home language (including sign language); have the books and music available for children to explore in interest areas. For more information about strategies to support children who are English learners, see the California Preschool Curriculum Framework, Volume 1, chapter 5.

Enhance children's knowledge and understanding through problem solv-

ing. Display pictures, puppets, or dolls of diverse health helpers (e.g., doctor, nurse, ambulance driver, fitness trainer, nutritionist). Be consistent; when showing pictures or puppets, children can recognize each image as a specific health helper. Teachers may represent a nutritionist as a person holding an apple, while a fitness trainer might be represented as a person walking, jogging, or riding a bicycle. Doctors and nurses are often identified as having a stethoscope around their necks. Teachers can vary images by showing males and females, different ethnic groups, and different age groups. Present children with situations and ask which health helper might help them in providing assistance. Remember: the people to

whom parents and children may turn for help will be based on resources available in the community, family decisions, and familiarity with certain professionals. Examples of simple situations might include the following ones: (1) a boy wants to know what foods will help him grow strong or where food comes from; (2) a girl has a stomachache; (3) a boy wants to learn to move faster; (4) a girl wears glasses or need glasses and needs a vision check; and (5) a boy has a loose tooth or a toothache.

Model and share information each day.

Using health products (e.g., soap, toothpaste, sunscreen) as part of the daily routine helps children understand what the products are used for. After applying first aid (e.g., cleaning a minor cut or scrape), teachers may let children pick an adhesive bandage from a selection of colors. Talk with children about activities they enjoy or experiences they have had. Adults can integrate health information by talking about their own visits to the dentist or doctor or participation in fitness events (e.g., community walking/ running races, bike rides).



4.0 Sun Safety

Exposure to the sun's ultraviolet radiation (UV rays) can occur from direct sunlight, reflected rays (e.g., off water, snow, or concrete), and sunlight that passes through windows (e.g., in a classroom, play area, or vehicle).

Teachers can encourage children to be outside, active, and safe—including "sunsafe." Immediate benefits of sun-safe practices are to help children stay cooler and more comfortable, which makes outdoor time more enjoyable. Sun-safe actions reduce the risk of painful sunburn, reduce eye discomfort, and lower the risk of **dehydration** and **heat-related illness**.²⁸

Teachers can promote sun safety by scheduling activities appropriately (i.e., avoid overexposure during peak hours of 10 a.m.–4 p.m.) and providing large shade areas for active outdoor play. They help children develop protective habits, including wearing wide-brimmed hats and 100 percent UV-protective sunglasses and covering skin with clothing. Sunscreen is considered a nonprescription medication; with written family

permission, teachers can apply sunscreen (i.e., having a **sun protection factor [SPF]** of 30 or above) to children. Teachers need to be aware of the UV index, air quality, and heat index; and should help prevent heat-related illness by encouraging children to drink plenty of water.²⁹

Research Highlight

Children adjust more slowly than adults do to changes in environmental heat. They also produce more heat during activities than adults, and they sweat less. Heat-related illness (e.g., dehydration, heat exhaustion, heat cramps) can cause serious complications for children. These conditions can escalate to heatstroke—a life-threatening condition. A child's body temperature can quickly reach 108 degrees Fahrenheit or higher. The body must be immediately cooled and emergency medical attention provided to prevent brain damage or death. 30, 31, 32

VIGNETTE

Mr. Jeff is putting sunscreen on four preschoolers. "Mr. Jeff, why do we have to put this sticky stuff on every day?" asks Mary. As he removes his gloves and puts away the sunscreen bottle, he explains, "The sun is good for us. It gives us light and warmth. But too much sun is not good for your skin. We put on the sunscreen to protect our skin from too much sun." Javier says, "I don't burn. I don't need this." Mr. Jeff replies, "Everyone needs to be sun-safe." Mr. Jeff encourages the children to run, jump, and try new activities as they play outdoors.

TEACHABLE MOMENT

Teachers discuss sun safety while preparing for outside activities. Topics may include the weather (e.g., sunny, cloudy, hot, cool) and reminders that the sun is always above, even when there are clouds and it is not hot. Teachers encourage children to observe physical differences among themselves, including skin color, and tell them that all skin

needs protection. They talk with children about other ways they protect their skin from the sun—for example, by wearing hats and sunglasses and playing in the shade. Teachers point out that clothing covers part of their bodies; therefore, it is necessary to put sunscreen on skin that is not covered. The children sing to the tune of "Head, Shoulders, Knees and Toes" when teachers apply sunscreen and point out how sunscreen is applied without sharing germs. Before going outside, children put on hats and sunglasses to protect the face, neck, and eyes. Teachers point to each body part, naming it both in English and in the home languages of the children in the group (including sign language). For more information about strategies to support children who are English learners, see the *California Preschool Curriculum Framework*, *Volume 1*, chapter 5.

Interactions and Strategies

Introduce vocabulary related to sun safety. Expose children to terms in English and in the children's home languages that apply to sun safety and other topics. For example, "protect" is a term that applies to sun safety ("Sunglasses protect your eyes from the sun"), community helpers ("Crossing guards help protect you from the cars on the street"), and oral health ("Toothbrushing protects your teeth from cavities").

Integrate sun safety with emergency preparedness and safety. A trip outdoors to study the weather can be used to teach science and safety. The wind, clouds, thunderstorms, rain, hurricanes, UV radiation, extreme heat, air quality, and other conditions that merit safety considerations might be discussed.

Encourage dramatic play. Gather a collection of hats, some that are widebrimmed and some that are not. Show the children the hat collection, and discuss how some hats protect people from

the sun better than others. Have children sort the hats into two piles (good protection versus poor protection). Provide a wide range of baby-doll hats, clothing, and sunglasses in the dramatic play area, and encourage children to use items to protect the dolls from the sun. Display photographs of the children (individual or group shot) wearing sun-safe clothing, sunglasses, and hats.



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Integrate sun safety with other health topics. For example, relate sun safety to understanding their body. Help children understand that their skin covers their entire body, even under hair. Discuss how skin protects what is inside their bodies; when skin is damaged (i.e., cut), they bleed. Through role play, demonstrate ways to protect skin (e.g., gloves, shoes, bandages, sunscreen). Discuss physical differences between children (e.g., height, hair color, skin color), and how all children, no matter what skin color they have, need to protect their skin. Integrate nutrition and science by discussing what the children eat and drink; compare this to other living things (e.g., animals and plants); and discuss what they need in order to grow. For example, plants need soil, water, and sunshine. Teachers encourage children to draw pictures or tell stories about the sun and what it does (e.g., feels warm, provides light, helps plants grow), but that too much sun is not good (e.g., makes them feel hot, causes sunburn).

Combine sun safety with other domains. Make sure children are protected with wide-brimmed hats, cover-up clothing, sunglasses, and sunscreen. On a sunny day, children may notice their shadows as they play outside. Encourage them to move about (i.e., exercise) as they watch their shadows. Older preschoolers may work in pairs: one strikes a pose, and the other does a chalk outline of the shadow. This activity helps children develop teamwork, body control, and fine motor skills. It also provides opportunities for children with different abilities to participate fully by sharing responsibilities. After drawing the outlines, introduce math skills by measuring the shadows. Repeat this activity at different times of the day and compare shadows; discuss how the sun moves through the sky.



Encourage decision making. Select a safe area (e.g., playground) and go for a shade walk with the children. Have the children look for shady areas, including small areas created by shadows of signs, fences, buildings, trees, and other objects. Engage children in helping to create temporary shade spaces by using blankets, sheets, parachutes, tarps, or large boxes. Play a game where you indicate (verbally or with signs) "shade" or "sun," and have children move from shady areas to sunny areas based on what you communicate.

Integrate sun safety into daily routines. Encourage each child to wear a hat and shatter-resistant (e.g., polycarbonate) sunglasses, and model this behavior. (These items may be provided by the preschool program or the family.) Although young children may not consistently wear hats and sunglasses, this will help form the basis for developing sun-safe habits.

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To prevent transmission of disease (e.g., ringworm, head lice), label items with each child's name and help children learn to store items in their personal storage spaces (i.e., cubbies). Check the heat index and air quality for your community each day, and post it during morning group time. Provide opportunities for children to help you offer water cups during outside play. Help children make up words for a sun-safety song, in English and in the children's home languages, that can be sung to a familiar tune; sing with children as they prepare for outside play time. For example:

(Sung to the tune of "Old MacDonald Had a Farm")

I am sun-safe all day long, E-I-E-I-O I wear a hat to shade my face, E-I-E-I-O

With a floppy hat here, and a floppy hat there

Here a hat, there a hat, everywhere a floppy hat

I am sun-safe all day long, E-I-E-I-O

Promote sun safety everywhere, every day, all year long. Teach children that the sun is shining on them every day, even on cloudy or cold days. Each month, take a picture of children practicing sun safety. Create a class book, collecting

stories the children share about the protection activity. At the end of the year, there will be a class picture book displaying year-round sun safety. For example, you may have pictures of children wearing sunglasses when there is snow on the ground.

Ensure that children have access to appropriate sun-safety items. Water should be available to children at all times. Each child should have his own wide-brimmed hat and UV-protective sunglasses. Demonstrate and model sunsafe actions, and encourage children to practice sun safety.



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Bringing It All Together

The children have been playing in interest areas and it is time to get ready for lunch. Mr. Akamu goes to Kalei and Patel, the lunch helpers for that day, and asks them to help him. They begin by washing their hands together; Mr. Akamu sings their favorite handwashing song as they rub their hands with soap lather. As Kalei and Patel put the napkins and plates on the table, Mr. Akamu begins singing their "get ready" song in the languages of the children to let them know to put away toys and prepare for lunch. In the beginning of the school year, Mr. Akamu selected a few songs children were going to sing and worked with a few parents to translate them into a few languages spoken by children in the class. As each child leaves an interest area, he or she goes to the sink and washes his or her hands.

Mr. Akamu notices that Aaron is still playing on the floor with the blocks. He goes to him and says, "Aaron, I see you are having fun stacking those blocks. It looks like you created a tall building. Let's leave it on this table, and you can come back to it after we eat our lunch." He watches Aaron go to the sink, quickly put his hands under the running water, and then dry them on a paper towel. As Aaron walks to the table, Mr. Akamu gently reminds him, "Aaron, do you remember why we wash our hands?" Aaron does not answer, so Mr. Akamu says, "Let's go to the sink and use soap while we sing our handwashing song. The soap will clean your hands before we eat."

Aaron looks at his hands and replies, "They're not dirty." Mr. Akamu looks at Aaron's hands and says, "They do look clean, but they might have germs on them. Remember the story we read about those invisible germs? Let's go make soap bubbles and wash away the germs."

reschool children have limited understanding of the process of cause and effect as it relates to health; many health concepts (e.g., germs) are beyond their comprehension. Yet, preschool is the developmental period during which children establish the routine practices and habits that form the basis for a healthy lifestyle. By observing adults model healthy behaviors, learning the steps in language scripts (verbal or signed), and taking part in daily routines (e.g., handwashing, toothbrushing, sun-safe practices), children begin to gain knowledge, develop skills, and establish their own health practices, beliefs, and values that they will carry on throughout their lives.

Engaging Families

Teachers can use the following strategies can help families to develop their children's health habits:

- Provide families with concise, accurate information about ways to promote and develop good health habits in children; information should be presented in English and the families' home languages. Capture their interest by addressing topics related to their children's age and development, as well as topics related to common health risks for children, such as childhood obesity, asthma, and dental caries. Injury prevention and first-aid topics, such as treating burns, bleeding, and choking, are also relevant. Provide written informational materials that are brief and easy to read. See "Teacher Resources" on page 278 for additional information.
- Provide individualized information, as well as general health information,



- to all families through daily contact, workshops, and parent meetings. All information should be presented in English and in the families' home languages. Accommodate family schedules by providing workshops and meetings at various times (e.g., morning, afternoon, evening), and arrange for child care during meetings.
- Show family members what the children are learning by sending home examples of work, encouraging families to visit the preschool and observe children in action, and sharing children's portfolios during home visits. Reinforce children's learning about health habits through take-home activities, lending libraries of readaloud books in the languages of the families in the group, and displays of children's work.
- As you introduce health routines (e.g., handwashing, toothbrushing), invite family members to participate and model. Encourage families to

- contribute ideas or materials to interest areas that reflect diverse health habits at home.
- ✓ Identify community resources related to health habits (e.g., handwashing, toothbrushing) and invite community personnel to participate in and bring resources to family workshops or parent meetings. Emphasize the role of home and family members in helping children to develop health habits, and inform all parents of the availability of free and low-cost community resources.
- ✓ Be sensitive to and respectful of different values or beliefs, as well as varying levels of access to health products and services. Gather information on available and accessible resources in the community, including those for children with special needs, and provide this information to all families, translated into their home languages.

Questions for Reflection

- 1. What elements of your program's physical environment promote healthy habits (e.g., handwashing, toothbrushing, sanitation)? What elements have created challenges? Have you adapted the environment to meet the needs of all children?
- 2. How do you support all families in seeking appropriate and accessible health products and medical care?
- 3. How have you provided time in the daily schedule to support health habits?
- 4. What disease-prevention skills have you been able to effectively help children learn by modeling each day?
- 5. In your library of children's books in home languages, what stories have you found that support learning about health habits?
- 6. What adaptations have you made to address the impact of various disabilities on children's ability to demonstrate healthy habits?