

# child care health connections

A HEALTH AND SAFETY NEWSLETTER FOR CALIFORNIA CHILD CARE PROFESSIONALS

Published by the California Childcare Health Program (CCHP), a program of the University of California, San Francisco School of Nursing (UCSF)



## Nature and Children's Health

**W**e know that when children spend time in the natural world of trees, grass, flowers, soil, creeks, animals and bugs, they learn many things about nature. Did you know that outdoor play in nature is also good for children's health? Several recent studies have shown that children who spend time in nature have lower rates of some common health problems:

- 1. Childhood obesity** Access to green spaces is associated with slower increases in body mass index (BMI). Outdoor play tends to be more active and leads to improved physical fitness and lower risk of obesity.
- 2. Childhood asthma** Children who live in neighborhoods with more trees have lower rates of early childhood asthma.
- 3. Attention Deficit Hyperactivity Disorder (ADHD)** Children with ADHD are better able to focus after a twenty-minute walk in a natural setting.
- 4. Mental health** Contact with nature decreases stress in children and acts as a buffer for children who have highly stressful lives.
- 5. Vitamin D deficiency** Time spend outdoors helps the body make vitamin D. Vitamin D is also called the 'sunshine vitamin' because exposure to the sun enables the skin to produce vitamin D. Although there are benefits to some sun exposure (about 15 minutes twice a week), safe sun practices should be observed.

### Tips to give children more time in nature:

- Take a walk in your neighborhood. Make a park or green space your destination.
- Have children look for items that can be found in nature, such as acorns, pine cones, leaves, seeds, sticks and twigs, worms and bugs, spider webs, and ant-hills. Encourage children's natural curiosity about nature but be careful to avoid poison oak and bugs that sting or bite!
- Plan a field trip to a local nature preserve, regional park or farm.
- Plant trees or gardens at your site. If your space is limited, use pots or garden boxes.
- Ask parents to provide sensible clothing and shoes for being outside.
- Work for safe playgrounds and parks in your community, including walking and biking trails.

### Reference:

National Environmental Education Foundation (NEEF) , 2008, Fact Sheet: Children's Health and Nature  
[www.neefusa.org/assets/files/NIFactSheet.pdf](http://www.neefusa.org/assets/files/NIFactSheet.pdf)

by Bobbie Rose RN

vol. 22 no. 2

March +  
April 2009

inside 

- 2** Resources for Planting a Garden in Your Program
- 3** Eczema in Infants
- 4** Importance of the Family Meal  
Fun Ideas for Vegetable Science Activities
- 5** Mercury in Fish
- 6** Quality Inclusive Childcare Checklist
- 7** Rotavirus Infections  
Newsletter Order Form
- 8** Health and Safety Resources

Call **800.333.3212**  
for free consultations  
on health and safety  
in child care



## health + safety tips

### Mercury Reduction

Mercury is a powerful neurotoxin that can damage the brain and nervous system. You may get exposed to mercury by eating fish contaminated with methyl mercury, breathing vapors released from incinerators and industries that burn mercury-containing fuels (e.g. coal), and breathing vapors from broken thermometers or other products containing mercury. New research finds that high fructose corn syrup, used to sweeten beverages and other foods, may also contains mercury.

#### Tips to Reduce Your Exposure

- Limit intake of large, long-lived fish (e.g., shark, tuna, and swordfish). Pregnant women and children under six years old should not eat more than two 6-ounce servings per week.
- Do not use mercury thermometers; use digital thermometers instead.
- Recycle used batteries, mercury thermometers, fluorescent light bulbs, and other mercury-containing products (Do not break fluorescent light bulbs).
- Support green alternatives to coal-fired power plants, such as wind and solar energy.
- Avoid beverages sweetened with high fructose corn syrup.



*Child Care Health Connections* is a bimonthly newsletter published by the California Childcare Health Program (CCHP), a community-based program of the University of California, San Francisco School of Nursing, Department of Family Health Care Nursing. The goals of the newsletter are to promote and support a healthy and safe environment for all children in child care reflecting the state's diversity; to recreate linkages and promote collaboration among health and safety and child care professionals; and to be guided by the most up-to-date knowledge of the best practices and concepts of health, wellness and safety. Information provided in *Child Care Health Connections* is intended to supplement, not replace, medical advice.

Major support for this publication is provided by the California Department of Education/Child Development Division. Funding for the articles on safe pest management is provided by the California Department of Pesticide Regulation (DPR).

Six issues of *Child Care Health Connections* are published each year in odd-numbered months at the subscription rate of \$25/year.

Newsletter articles may be reprinted without permission if credit is given and a copy of the issue in which the reprint appears is forwarded to the California Childcare Health Program at the address below.

#### **Subscriptions, Renewals, Inquiries**

Contact CCHP at (800) 333-3212 or [cchp@ucsfchildcarehealth.org](mailto:cchp@ucsfchildcarehealth.org).

#### **CCHP Program Office**

1950 Addison St., Suite 107  
Berkeley, CA 94704  
T (510) 204-0930  
F (510) 204-0931

#### **California Child Care Healthline**

(800) 333-3212  
[healthline@ucsfchildcarehealth.org](mailto:healthline@ucsfchildcarehealth.org)

[www.ucsfchildcarehealth.org](http://www.ucsfchildcarehealth.org)

#### **Newsletter Editors**

A. Rahman Zamani, MD, MPH  
Judy Calder, RN, MS  
Tahereh Garakani, MA Ed  
Bobbie Rose, RN  
Victoria Leonard, RN, FNP, PHD

## **Planting a Garden in Your Program**

# Q

**I want to start a garden for the kids in my family child care program to promote healthy eating, but where do I begin?**

# A

Begin by identifying a site with lots of sun and access to water. It can be a place to put large containers or small milk carton containers planted by each child, or a raised garden or one dug up to form rows for planting. You may want to be careful selecting a site too close to old buildings with soil that may contain lead from old peeling paint which children may ingest as they "till the soil." If there are animals in your neighborhood, like rabbits or cats, you may want to think about an area that can be fenced to keep them out. Next, you may want to enlist the help of parents and local nursery staff for advice (what grows best in the area), donations (good soil is critical) and assistance (digging up the soil, weeding, watering). Kids can also be involved with these tasks and can suggest foods that they might want to plant and eat. You'd be surprised how many people will want to be involved

Next you'll have to decide on what you want to plant. Consider the season; in spring, plant cucumbers, squash, basil, tomatoes, okra, eggplant, beans and black eyed peas. Think about plants that grow fast such as radishes or beans. Before planting make sure that nothing is poisonous such as potato leaves. A free poisonous plant poster can be obtained from the California Poison Control System [www.calpoison.org](http://www.calpoison.org). Also, be aware of plants that attract stinging insects such as trailing rosemary. Another poison prevention action is not to use pesticides. You may want to learn more about Integrated Pest Management techniques to avoid pesticide use at [www.schoolipm.info.org](http://www.schoolipm.info.org) or <http://ipm.ucdavis.edu>. Lastly, think about getting child-sized tools, such as watering cans, rakes and trowels that will be easier and safer for young children to use.

Gardening projects not only improve appreciation for healthy fresh food but they can be integrated with math, science, reading and social skills. Below are some additional gardening resources:

- Early Sprouts: Cultivating Healthy Food Choices in Young Children and Hollyhocks and Honeybees: Garden Projects for Young Children, books from Redleaf Press, [www.redleafpress.org](http://www.redleafpress.org)
- Gardening with Young Children: It's Easier Than You Think, article [www.childcarequarterly.com/spring05\\_story1a.html](http://www.childcarequarterly.com/spring05_story1a.html)
- [www.naeyc.org](http://www.naeyc.org) search "gardening."

by Judy Calder, RN, MS





## Atopic Eczema: A Type of Skin Rash

**A**topic eczema is a complex, common skin condition. It can make day-to-day life challenging for the children who have it and for child care providers who care for them. Understanding what eczema is and how it is treated can make it easier to meet the needs of the child with eczema in child care settings.

### What is atopic eczema?

Atopic eczema (AE) is a chronic skin rash that is *very itchy*. Some compare it to having poison oak. Children with AE often itch their skin so much that they also develop bacterial infections in their skin. The itching can lead to sleep loss and irritability. The symptoms of AE usually appear in infancy, often in the first six weeks after birth, and can come and go. Children with AE often have hay fever and asthma. The good news is that two thirds of children with AE grow out of it by early adolescence. For those who do not outgrow it, symptoms often continue into adult life, and can cause psychological problems when children become sensitive to the way others respond to their appearance.

### What causes atopic eczema?

Until recently, AE was thought to be an allergic disease that leads to dry skin and rashes. New research suggests that AE may also be caused by an inherited skin defect. Some children with AE do not make a natural moisturizer that helps to form and maintain the skin's top layer. Without this natural moisturizer, the skin becomes dry and cracked. A child who develops symptoms of itching immediately after eating certain foods may also have food allergies. AE and food allergies should be diagnosed and treated by a health care provider.

### When should children with AE be excluded from care?

AE is not contagious! Children with eczema should not be excluded from ECE settings unless they have a secondary bacterial infection that has not been treated.

### What triggers AE?

- Dry, winter weather
- Hot, humid weather
- Sweating
- Irritating substances, like harsh soaps and laundry detergents
- Too much bathing, especially in hot water, without moisturizing
- Stress
- Allergens (materials that cause allergic reactions) such as foods, pollen, animal fur or dander, or dust
- Colds or flu

### How is AE treated?

There is no cure for AE. The most important strategy for controlling AE is keeping the skin intact by moisturizing. Apply ointments (which have no water in them) or creams (which have a little water) twice a day, especially to wet skin immediately after bathing. Do not use lotions or oils, which have more water than oil and may act to dry the skin. Hydrating the skin helps keep it intact and keeps out allergens and irritating substances. Other steps include:

- Use of corticosteroid ointments (use of these prescription ointments requires careful supervision; do not apply them in ECE settings without clear directions from the health care provider, and a parent's written permission and instructions).
- Avoiding scratchy clothing (cotton is best)
- Keeping fingernails short to prevent breaking the skin

Additional medications may be prescribed by the health care provider, depending on the severity of the AE.

### Resources:

The National Eczema Association, [www.nationaleczema.org](http://www.nationaleczema.org)

The Eczema & Sensitive Skin Education (EASE) Program  
[www.easeeczema.org/](http://www.easeeczema.org/)

by Vickie Leonard, RN, FNP, PhD

# The Importance of the Family Meal

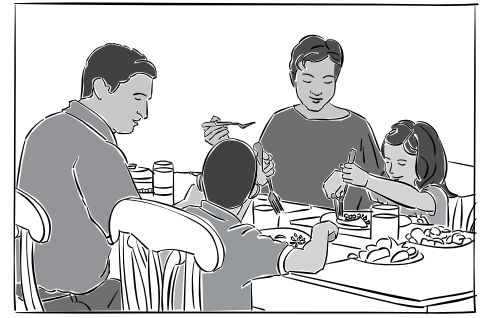
**I**n our hurried lives, sometimes we overlook the importance of simple steps to help children and families become strong and healthy. Eating together as a family helps children long after the meal is over. There are many good reasons to promote family meals.

**Family meals lead to better nutrition.** They provide more nutrients that are needed for healthy growth and development. Family meals expose children to a greater variety of healthy foods and lower the intake of soft drinks and snack foods.

**Family meals improve family relationships and emotional health.** Families become more connected when the ritual of the family meal is practiced daily. Children from families where meals are eaten together are more likely to be emotionally content and have better peer relationships. As these children grow, they work harder in school, have better communication with their parents and enjoy stronger family ties.

**Family meals improve learning.** Children who eat with their families have improved vocabularies and reading skills. The time spent together around the table provides a chance for important conversations. It's a time to tell stories and share experiences. It is also a time to learn social skills such as table manners and taking turns.

As children grow older, those who eat family meals have fewer risk-taking behaviors. Teens who eat dinner with their families 5 times a week or more, are less likely to take drugs, feel depressed or get into trouble. Young children who learn the habit of eating with their families are more likely to be present for family meals when they are teens.



Early Care and Education (ECE) providers can help families develop this good habit while children are still young. Here are some tips you can pass on to the families in your program:

- Plan ahead. It is difficult to come up with an idea for a meal when you are hungry and tired. Try to have food in the house and an idea of what to make before you get home.
- Involve the whole family. Prepare, serve and clean up together. Children love to participate and are more likely to try new foods if they help prepare them.
- Make mealtime a happy time. Avoid power struggles over food. Be sensitive to normal developmental behaviors; for example, young children may not be able to sit at the table for a long time and are often messy.
- Leave the TV turned off. Focus on the conversation and enjoying your food!

### Resources and References:

NAP SACC, Workshops for Child Care Providers: Working with Families, for more information, [www.napsacc.org/](http://www.napsacc.org/)

Fiese, B., Schwartz, M., Society for Research in Child Development, 2008, Reclaiming the Family Table: Mealtimes and Child Health and Well Being.

by Bobbie Rose RN

## BOX OF FUN

### Tasty, Fresh and Fun!

Make snack time more fun by studying edible plants! Combining science and snack time will show children how to look more closely at what they eat and encourage them to eat healthy foods. Most children are interested to know that much of our food comes from seeds, fruits, flowers, leaves, stems and roots. Use the study of plants as a way to introduce new foods and to teach about how different foods grow.

#### Example:

Invite children to experience fresh peas in the pod. Discuss how the peas we eat are actually seeds. Talk about how a seed can start a new plant. Show pictures of how this happens. Let the children remove the peas from the pod. Later, at snack time, serve fresh peas. Consider planting some peas in a garden box or in pots at your site.

## Mercury in Fish

**F**ish is an important source of nutrients and can be a good part of a healthy diet. It is high in protein, low in saturated fat, and contains iron and omega-3 fatty acids. Omega-3 fatty acids prevent heart disease and are beneficial for children's brain and vision development. Yet, all types of fish and shellfish have some levels of mercury in them and certain types have higher levels of mercury than others.

### What is mercury?

Mercury is an element that is naturally present in the environment and exists in three forms—element or metallic mercury (a silvery metal that is liquid in room temperature), organic and inorganic compounds. Mercury is used in inks, adhesives, medical devices such as blood-pressure instruments and thermometers, and as a catalyst in manufacturing processes. The “silver” fillings or dental amalgams, still widely used in most parts of the world, generally have 50 percent mercury. Mercury is a neurotoxin that is especially dangerous to the developing nervous system of unborn babies and young children. Methyl mercury (organic mercury) is particularly harmful to the developing brain.

### How are we exposed?

Exposure to inorganic and elemental mercury is rare. It typically happens by inhalation or ingestion. Indoor air pollution after spills of elemental mercury and outdoor air pollution from industrial emissions are the most important sources of inhaled mercury. In some ethnic groups, mercury compounds are used for cosmetics and certain sects use them in religious ceremonies. Dental amalgams can also expose people to inorganic mercury. The main source of human exposure to organic mercury is from eating contaminated fish. Mercury released into the air through industrial pollution can accumulate in streams and oceans, turn into methyl mercury, and be absorbed by fish.

### Why is mercury dangerous?

Mercury is a toxic chemical that can build up in the body and cause a wide range of problems. All forms of mercury can affect the kidneys and brain. Symptoms can include irritability, tremor, shyness, changes in vision or hearing, and memory problems. Mercury can cross the placenta and affect the neurological development of the fetus. The brain is especially susceptible to damage. Mercury exposure can affect children's learning, movement and behavior.

### Who is at greater risk?

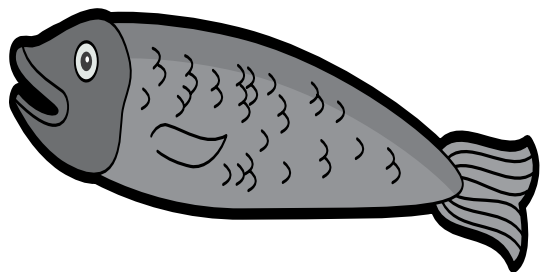
Although most people are not at risk by eating fish, some types of fish contain higher levels of mercury that may harm unborn babies or young children. Risks also depend on the amount of fish eaten and the levels of mercury in the fish. Larger fish that eat other fish or fish that are long-lived tend to have higher levels of mercury than smaller fish.

The Food and Drug Administration (FDA) and Environmental Protection Agency (EPA) are advising women who may become pregnant, pregnant women, breastfeeding mothers, and young children to keep their seafood consumption to a minimum and eat fish that are lower in mercury. Pregnant women are advised to avoid shark, swordfish, king mackerel, and tilefish.

### Minimizing the risk

To get the potential health benefits of eating fish and minimize your risk of eating too much mercury:

- Eat no more than 12 ounces (about two meals) of fish per week.
- Use fish varieties that are considered lower in mercury. Catfish, salmon, canned light tuna, and pollock are some commonly eaten fish that are low in mercury.
- Check local advisories about the safety of fish caught in your local area.



### References and Resources

The Dietary Guidelines for Americans at [www.mypyramid.gov](http://www.mypyramid.gov)

The American Academy of Pediatrics Policy Statement at <http://aappolicy.aappublications.org>

FDA and the Center for Food Safety and Applied Nutrition [www.cfsan.fda.gov](http://www.cfsan.fda.gov)

The Environmental Protection Agency's Fish Advisory Website [www.epa.gov/ost/fish](http://www.epa.gov/ost/fish)

by A. Rahman Zamani, MD, MPH

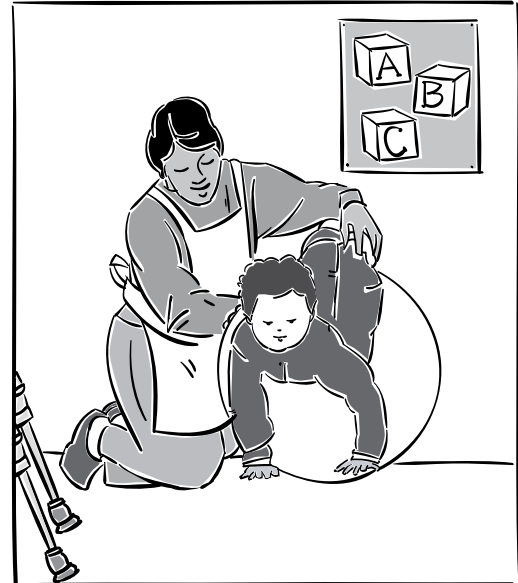




# Quality Inclusive Child Care Checklist

**Q**uality care provides a safe and healthy learning environment that supports the social, physical, intellectual, creative and emotional development of all children. This checklist assists parents of children with disabilities or special needs in looking, listening and asking questions in the process of selecting the child care setting that best meets the needs of their child and family. It can also assist programs in identifying the necessary components of a quality inclusive child care setting as they evaluate their program and services provided.

- Are families and children welcomed, and are children greeted in a loving, respected way? Are parents welcome at anytime during the day?
- Is the overall atmosphere bright, cheerful and child-focused, without being overwhelming?
- Do you notice caregivers/teachers really listening to children and families?
- Are caregiving and teaching practices responsive to differences in children's abilities, interests and experiences?
- Are the sounds of children predominantly happy? Does it appear that the adults and children enjoy being together?
- Is the physical environment safe, secure and free of barriers that limit or prevent access and mobility (e.g., ramps, outside play area, bathrooms)?
- Is there a fenced-in outdoor play area with a variety of safe equipment? Can the caregivers/teachers see the entire play yard at all times?
- Are learning materials and toys sufficient, safe, clean and within reach of all children? Are there enough for the number of children?
- Are there different areas for resting, quiet play and active play? Is there enough space for the children in all of these areas?
- Is there a daily balance of active and quiet activities (e.g., play time, story time, activity time and nap time)? Are the activities appropriate for each ability and age level?
- Are the majority of planned developmental activities individualized or in small groups?



- Do learning materials, books and pictures reflect diversity, including children with special needs?
- Do caregivers/teachers use a variety of instructional strategies to meet the individual needs of children?
- Do caregivers/teachers facilitate or enhance interactions between children with and without disabilities?
- Are children with disabilities included socially and engaged in meaningful activities throughout the day?
- Are children with disabilities given support and assistance when needed, and is it unobtrusive?
- Does the program accept children who are not yet walking or toilet-trained?
- Are therapeutic and/or support services such as OT, PT and Speech Therapy welcomed and provided on-site?
- Are parent's ideas welcomed? Are there ways for families to be involved in the program?
- Does communication between parents and staff seem open and ongoing? Are events and information shared with families regularly?
- Is the program licensed by the state? Is the program accredited or working towards national accreditation?

# Rotavirus Infections

## What Is It?

Rotavirus is the most common cause of severe, seasonal diarrhea in infants and young children. It is most common in children between six months and two years of age. Virtually all children have had rotavirus infection by the time they are five years old. In the U.S., rotavirus causes outbreaks of diarrhea during the winter months, and it is a special problem in the child care setting and children's hospitals. In the US, 50,000 children are hospitalized a year with Rotavirus. Parents of a child with a first episode of rotavirus miss an average of three days of work if exclusion rules in child care are strictly enforced.

## What Are the Symptoms?

Children with a rotavirus infection have fever (often high); nausea; frequent, intense vomiting; and watery diarrhea (gastroenteritis). After two days, the fever and vomiting usually stop, but the diarrhea can continue for five to seven days and sometimes longer. As with all viruses, some rotavirus infections, especially in children and adults who have had a prior rotavirus infection, cause few or no symptoms.

Children with rotavirus infection can become dehydrated if they lose too much body water due to vomiting and watery diarrhea. This is the primary cause for hospitalization of children with rotavirus. Check for signs of dehydration including dry lips and tongue, dry skin, sunken eyes, fewer than six wet diapers a day, or (in an older child) too few trips to the bathroom to urinate. Ask the parent to call the health care provider immediately if you see any of these signs. Infants can dehydrate quickly.

Children with rotavirus should not be given clear liquids. Instead, offer oral rehydration solutions like Pedialyte, Infalyte, and Rehydralyte which contain the right mix of salt, sugar, potassium, and other minerals to help replace lost fluids and prevent dehydration.

## Who Gets It and How?

Illness transmission is by the fecal-oral route. There are billions of Rotavirus particles present in the stool of an infected child. They are present one to two days before the onset of symptoms and can persist for up to three weeks after. Rotavirus can survive on objects and surfaces in child care centers for long periods. Respiratory transmission also may have a role in disease spread. Transmission within families and institutions is common because of the ease of transmission. Rotavirus causes 20-45% of the outbreaks of diarrheal illnesses in child care settings. The rate of hospitalization from rotaviral diarrhea in infected children can be as high as 2.5 percent.

## When Should People with this Illness Be Excluded?

Children with rotavirus should be excluded from child care if the stool cannot be contained by diapers or toilet use.

## Where Should I Report It?

Report cases of rotaviral diarrhea to parents and staff.

## How Can I Limit the Spread of Rotavirus Infections?

- Promote immunization since it is the only practical way to avoid rotavirus infection. There is a new vaccine called Rotateq\* that is very effective in protecting children from rotavirus. The CDC recommends that infants receive three doses of the oral vaccine at two, four, and six months of age.
- Clean and sanitize toys and surfaces.
- Follow proper hand washing procedures.

\*Trade name, licensed by the FDA in February, 2006.

## child care health connections

**To order** *Child Care Health Connections* Newsletter (6 issues per year) mail this form and your \$25 check (payable to UC Regents) to: California Childcare Health Program / 1950 Addison St, Suite 107 / Berkeley, CA 94704-1182. Fax purchase orders to 510-204-0931. Price includes postage.

Name \_\_\_\_\_

Agency \_\_\_\_\_

E-mail \_\_\_\_\_

Phone \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip Code \_\_\_\_\_

County \_\_\_\_\_



### **Green schools buying guide launched**

The Green Schools Initiative is launching a new *Green Schools Buying Guide* to help schools make purchasing decisions that will protect children's health and the environment. For each product category, the guide provides a 'primer' on the product: Why buy green? How can you tell if a product is green (criteria or standards for purchasing decisions)? Can you afford to buy green? There is green product information on how to buy green, as well as other environmentally-friendly options and resources. The guide also includes sample buying policies for schools, as well as a list of procurement contract opportunities to facilitate green buying at big discounts for schools. <http://greenschools.live.radicaldesigns.org/display.php?modin=50>

### **Food and Nutrition Services**

#### **Releases New Nutrition Messages for Low-income Moms and Children**

Food and Nutrition Services has released a set of 16 core nutrition messages and supporting content (such as tips and recipes) in a new publication entitled, "*Maximizing the Message: Helping Moms and Kids Make Healthier Food Choices.*" In addition

to conveying the messages and supporting content, this new resource provides background information, an overview of the developmental approach, lessons learned from 30 focus groups with low-income mothers and children, implementation approaches and evaluation guidance. Available on the FNS website at [www.fns.usda.gov/FNS/corenutritionmessages/Maximizing.htm](http://www.fns.usda.gov/FNS/corenutritionmessages/Maximizing.htm)

### **The Changing Face of the United States: The Influence of Culture on Early Child Development**

The cultural beliefs, values, and behaviors within a family all have an impact on early child development. A new report, *The Changing Face of the United States: The Influence of Culture on Early Child Development*, is an important review of the issue and a summary of the latest research dealing with the impact of culture on early childhood services. This research summary was made possible through generous funding by the Annie E. Casey Foundation and the Bernard van Leer Foundation. To read this free resource, go to [www.zerotothree.org/site/DocServer/Culture\\_book.pdf?docID=6921](http://www.zerotothree.org/site/DocServer/Culture_book.pdf?docID=6921)

### **New Publications from CSCCE**

The Center for the Study of Child Care Employment (CSCCE) announced the release of two new publications:

- Diversity and Stratification in California's Early Care and Education Workforce
- An abridged version, in Spanish translation, of 2007 policy brief, *Chutes or Ladders? Creating Support Services to Help Early Childhood Students Succeed in Higher Education*

Both publications are available online at [www.irle.berkeley.edu/cscce/](http://www.irle.berkeley.edu/cscce/)

### **First 5 California Launches Asian Parenting Resource**

First 5 California has made its popular comprehensive parenting resource free in four different Asian languages including Mandarin, Cantonese, Korean and Vietnamese.

*The Kit for New Parents* offers resources for parents on topics such as prenatal care, nutrition, discipline and finding quality child care. Each Asian language kit also comes with a DVD that explains practical advice on topics from prenatal care to information about a child's first five years. [www.cafc.ca.gov](http://www.cafc.ca.gov)

---

California Child Care Health Program  
1950 Addison Street, Suite 107  
Berkeley, CA 94704-1182

CHANGE SERVICE REQUESTED