

CHILD CARE PROVIDERS' HEALTH AND WELL BEING

Applicable Standards from:

CARING FOR OUR CHILDREN

National Health and Safety Performance Standards:
Guidelines for Out-of-Home Child Care
Second Edition

A Joint Collaborative Project of

American Academy of Pediatrics
141 Northwest Point Blvd.
Elk Grove Village, IL 60007-1098

American Public Health Association
8001 I Street, N.W.
Washington, DC 20001-3710

National Resource Center for Health and Safety in Child Care
University of Colorado Health Sciences Center at Fitzsimons
Campus Mail Stop F541, PO Box 6508
Aurora, CO 80045-0508

Support for this project was provided by the
Maternal and Child Health Bureau,
Health Resources and Services Administration,
Department of Health and Human Services
(Cooperative Agreement # U93 MC 00098)

Adapted from *Caring for Our Children, National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care*, Second Edition

Copyright 2004 by
American Academy of Pediatrics
American Public Health Association
National Resource Center for Health and Safety in Child Care

All rights reserved. This book is protected by copyright. No part of this book may be reproduced in any form or by any means, including photocopying, or utilized by any information storage and retrieval system without the prior written permission of the publisher.

For reprint requests, please contact the Permissions Editor at the American Academy of Pediatrics by fax 847-434-8780 or mail American Academy of Pediatrics, PO Box 927, Elk Grove Village, IL 60006-0927

The National Standards are for reference purposes only and shall not be used as a substitute for medical consultation, nor be used to authorize actions beyond a person's licensing, training, or ability.

INTRODUCTION	iv
ORIENTATION AND TRAINING	1
USE OF HEALTH CONSULTANTS	17
HEALTH APPRAISALS AND ASSESSMENTS	20
IMMUNIZATIONS	23
OCCUPATIONAL HAZARDS	25
GENERAL.....	25
EXPOSURE TO BODY FLUIDS.....	26
EXPOSURE TO TOXIC SUBSTANCES.....	29
INFECTIOUS DISEASES	34
HAEMOPHILUS INFLUENZAE TYPE B (Hib).....	34
STREPTOCOCCUS PNEUMONIAE.....	36
NEISSERIA MENINGITIDIS (MENINGOCOCCUS).....	37
PERTUSSIS	38
GROUP A STREPTOCOCCAL (GAS) INFECTION	39
TUBERCULOSIS.....	40
PARVOVIRUS B19	42
UNSPECIFIED RESPIRATORY TRACT INFECTION	42
HERPES VIRUSES	43
HERPES SIMPLEX.....	43
VARICELLA-ZOSTER (CHICKENPOX) VIRUS.....	44
CYTOMEGALOVIRUS (CMV).....	45
ENTERIC (DIARRHEAL) AND HEPATITIS A VIRUS (HAV) INFECTIONS	46
BLOODBORNE INFECTIONS	50
HEPATITIS B VIRUS (HBV)	50
HYGIENE FOR HEPATITIS B VIRUS (HBV) INFECTION.....	52
HEPATITIS C VIRUS (HCV)	53
HUMAN IMMUNODEFICIENCY VIRUS (HIV)	53
ADMINISTRATIVE POLICIES ON HIV INFECTIONS	53
PREVENTING TRANSMISSION OF HIV INFECTION	55
SKIN INFECTIONS	55
SCABIES.....	55
PEDICULOSIS CAPITIS (HEAD LICE).....	56
RINGWORM	56
INJURIES	57
NOISE LEVELS	58
STRESS	59
EXCLUSION DUE TO ILLNESS	60
PROHIBITED BEHAVIORS	63
PERSONNEL POLICIES AND RECORDS	65
APPENDIX B: MAJOR OCCUPATIONAL HEALTH HAZARDS	77
APPENDIX D: GLOVING	78
APPENDIX E: CHILD CARE STAFF HEALTH ASSESSMENT	79
APPENDIX BB: CONTACT INFORMATION	80
INDEX	83

INTRODUCTION

Caring for Our Children: National Health and Safety Performance Standards for Out-of-Home Child Care Programs, 2nd Edition (CFOC, 2nd Ed.) was released by the American Academy of Pediatrics (AAP), American Public Health Association (APHA), the Maternal and Child Health Bureau (MCHB), and the National Resource Center for Health and Safety in Child Care (NRC) in January 2002. The full edition of *CFOC, 2nd Ed.* contains 707 standards and recommendations on all aspects regarding the health and safety of children in child care settings. These standards were developed by leading health and safety experts over a period of four years. Each standard includes rationale behind the need for such practices. The full edition is available on the NRC web site at <http://nrc.uchsc.edu/CFOC/index.html>. Print copies can be purchased from the American Academy of Pediatrics (www.aap.org) and the American Public Health Association (www.apha.org).

In an effort to make select subject areas more accessible to intended users, the National Resource Center for Health and Safety in Child Care (NRC) is developing smaller documents on specific subject areas. This document is a compilation of the standards on child care staff health and well-being.

Over 2.3 million paid caregivers provide child care services to children ages 0 through 5 in the United States. In order to provide quality programs for those millions of children in their care, providers must take good care of themselves as well as taking good care of children. Child care work is a physically and emotionally demanding job that requires providers to lift and carry many pounds frequently each day; to sit on the floor many hours each week; to daily come in contact with body fluids through care-taking; to often be exposed to infectious illnesses; and to deal emotionally with the responsibility for the welfare of the children in their care and with their parents' concerns as well.

Child care workers have one of the most demanding and stress-filled professions. Of particular concern for the health and well-being of child care providers are exposure to and control of infectious diseases, good ergonomics to prevent injuries, minimizing occupational hazards, and dealing with stressful situations involving children and parents. Another stressor that child care providers may experience is to react quickly and calmly in emergency situations. Readers should take special note of standards 8.022 and 8.024 (pgs. 15-6) dealing with handling urgent medical care, threatening incidents and evacuation plans.

In order for providers to promote good mental and physical health of children, they need to experience healthy work environments and take good care of themselves. Child care providers should be role models in health promotion and disease prevention for both the parents who entrust their children to them and for the children themselves.

INTENDED AUDIENCES

The intended audiences for this document are:

- child care providers who need to understand the health hazards involved in working in child care settings and the preventive measures to take to reduce the risk of such hazards;
- state regulators and policy makers who are formulating or changing state regulations;
- health consultants and trainers who can promote and teach appropriate and positive occupational health practices;
- parents who need to understand the importance of healthy work environments for the providers who take care of their children.

Throughout this document there will be references to other standards contained in the full edition of *CFOC, 2nd Ed.* that are not present in this document. For example, comments in Standard 1.023 regarding the orientation of all staff refers to many standards which are not in this document but are found in the full edition of *CFOC, 2nd Ed.* In the web version, the user can click on the link to these standards to get to wording of the standard in *CFOC, 2nd Ed.* Also, standards in this compilation are not necessarily in numerical order because similar topics were brought together from different sections in the larger *CFOC, 2nd Ed.* Select appendices, from *CFOC, 2nd Ed.*, appropriate to staff health and well-being, were included in this compilation. For a complete list of appendices see *CFOC, 2nd Ed.*'s table of contents at <http://nrc.uchsc.edu/CFOC/HTMLVersion/TOC.html>

We would like to give special thanks to Rene Gratz, PhD, Phyllis Stubbs-Wynn, MD, MPH, and R. Lorraine Brown, RN, BS, for reviewing this compilation of standards on staff health and well-being. We would also like to thank all those individuals who contributed to *CFOC, 2nd Ed.* A listing can be viewed at: <http://nrc.uchsc.edu/CFOC/PDFVersion/Acknowledgments.pdf>

As with all areas in health, new research comes forth and we recommend that users continue to visit the following web sites for the most up-to-date information on child care provider health and well-being:

Center for the Child Care Workforce
<http://www.ccw.org/>

Healthy Child Care: Health and Safety Ideas for the Young Child
<http://www.healthychild.net>

National Association of Child Care Resource and Referral Agencies
<http://www.nrex.org/>

National Child Care Information Center
<http://nccic.org>

National Resource Center for Health and Safety in Child Care
<http://nrc.uchsc.edu>

National Training Institute for Child Care Health Consultants
<http://www.sph.unc.edu/courses/childcare/>

For questions or assistance on these standards or *Caring for Our Children, 2nd Edition*, please contact:
National Resource Center for Health and Safety in Child Care
1-800-598-5437
<http://nrc.uchsc.edu>
natl.child.res.ctr@UCHSC.edu

ORIENTATION AND TRAINING

STANDARD I.023 INITIAL ORIENTATION OF ALL STAFF

All new full-time and part-time staff shall be oriented to, and demonstrate knowledge of, the items listed below. The director of any center or large family child care home shall provide this training to all newly hired caregivers before they begin to care for children. For centers, the director shall document, for each new staff member, the topics covered and the dates of orientation training. Staff members shall not be expected to take responsibility for any aspect of care for which their orientation and training have not prepared them.

Small family child care home providers shall avail themselves of orientation training offered by the licensing agency, a resource and referral agency, or other such agency. This training shall include evaluation that involves demonstration of the knowledge and skills covered in the training lesson.

The orientation shall address, at a minimum:

- a) Regulatory requirements;
- b) The goals and philosophy of the facility;
- c) The names and ages of the children for whom the caregiver will be responsible, and their specific developmental needs;
- d) Any special adaptation(s) of the facility required for a child with special needs for whom the staff member might be responsible at any time;
- e) Any special health or nutrition need(s) of the children assigned to the caregiver;
- f) The planned program of activities at the facility. See Program of Developmental Activities, STANDARD 2.001 through STANDARD 2.027;
- g) Routines and transitions;
- h) Acceptable methods of discipline. See Discipline, STANDARD 2.039 through STANDARD 2.043; and Discipline Policy, STANDARD 8.008 through STANDARD 8.010;

- i) Policies and practices of the facility about relating to parents. See Parent Relationships, STANDARD 2.044 through STANDARD 2.057;
- j) Meal patterns and food handling policies and practices of the facility. See Plans and Policies for Food Handling, Feeding, and Nutrition, STANDARD 8.035 and STANDARD 8.036; Food Service Records, STANDARD 8.074; Nutrition and Food Service, STANDARD 4.001 through STANDARD 4.070;
- k) Occupational health hazards for caregivers, including attention to the physical health and emotional demands of the job and special considerations for pregnant caregivers. See Occupational Hazards, STANDARD 1.048; and *Major Occupational Health Hazards*, Appendix B;
- l) Emergency health and safety procedures. See Plan for Urgent Medical Care or Threatening Incidents, STANDARD 8.022 and STANDARD 8.023; and Emergency Procedures, STANDARD 3.048 through STANDARD 3.052;
- m) General health and safety policies and procedures, including but not limited to the following:
 - 1) Handwashing techniques and indications for handwashing. See Handwashing, STANDARD 3.020 through STANDARD 3.024;
 - 2) Diapering technique and toilet use, if care is provided to children in diapers and/or children needing help with toilet use, including appropriate diaper disposal and diaper-changing techniques. See Toilet, Diapering, and Bath Areas, STANDARD 5.116 through STANDARD 5.125; Toilet Use, Diapering, and Toilet Learning/ Training, STANDARD 3.012 through STANDARD 3.019; Toilet Learning/ Training Equipment, Toilets, and Bathrooms, STANDARD 3.029 through STANDARD 3.033;
 - 3) Identifying hazards and injury prevention;
 - 4) Correct food preparation, serving, and storage techniques if employee prepares food. See Food Safety, STANDARD 4.042 through STANDARD 4.060;
 - 5) Knowledge of when to exclude children due to illness and the means of illness transmission;

- 6) Formula preparation, if formula is handled. See Plans and Policies for Food Handling, Feeding, and Nutrition, STANDARD 8.035 and STANDARD 8.036; and Nutrition for Infants, STANDARD 4.011 through STANDARD 4.021;
- 7) Standard precautions and other measures to prevent exposure to blood and other body fluids, as well as program policies and procedures in the event of exposure to blood/body fluid. See Prevention of Exposure to Body Fluids, STANDARD 3.026;
- n) Recognizing symptoms of illness. See Daily Health Assessment, STANDARD 3.001 and STANDARD 3.002;
- o) Teaching health promotion concepts to children and parents as part of the daily care provided to children. See Health Education for Children, STANDARD 2.060 through STANDARD 2.063;
- p) Child abuse detection, prevention, and reporting. See Child Abuse and Neglect, STANDARD 3.053 through STANDARD 3.059;
- q) Medication administration policies and practices;
- r) Putting infants down to sleep positioned on their backs and on a firm surface to reduce the risk of Sudden Infant Death Syndrome (SIDS).

Caregivers shall also receive continuing education each year, as specified in Continuing Education, STANDARD 1.029 through STANDARD 1.036.

RATIONALE: Upon employment, staff members should be able to perform basic sanitizing and emergency procedures. Orientation ensures that all staff members receive specific and basic training for the work they will be doing and become acquainted with their new responsibilities. Orientation programs for new employees should be specific to an individual facility since facilities and the children enrolled vary(2).

Because of frequent staff turnover, directors are obligated to institute orientation programs that protect the health and safety of children and new staff members.

Orientation and ongoing training are especially important for aides and assistant teachers, for whom preservice educational requirements are limited. Entry into the field at the level of aide or assistant teacher should be attractive and easy for members of the families and cultural groups of the children in care to enter the field. Training ensures that staff members are challenged and stimulated, have access to current knowledge, and have access to education that will qualify them for new roles. Offering a career ladder will attract individuals into the child care field, where labor is in short supply. Ongoing training in one role can become preservice training to qualify for another role.

Health training for child care staff not only protects the children in care, infectious disease control in child care helps to prevent spread of infectious disease in the community. Young children in child care have been shown to be associated with community outbreaks.

COMMENTS: Many states have preservice education and experience qualifications for caregivers by role and function. States are including ongoing health training in their licensing requirements; the broader skills have proved important and necessary to teachers in part-day and full-day programs alike. Both full-day and part-day programs require competence in all facets of child development, not just the learning components.

Child care staff members are important figures in the lives of the young children in their care and in the wellbeing of families and the community. In the future, all training for child care staff should include more attention to health issues.

Training in conflict resolution is encouraged. Child abuse includes also children's abuse of their peers. Staff should learn how to handle conflict resolution among the children and among themselves, as well as modeling examples of conflict resolution from which children can learn.

Colleges and accrediting bodies should examine teacher preparation guidelines and substantially increase the health content of early childhood professional preparation.

For definitions of Standard precautions, Transmission-based precautions, Universal precautions, see Glossary.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD I.026 FIRST AID TRAINING FOR STAFF

The director of a center and a large family child care home and the caregiver in a small family child care home shall ensure that all staff members involved in providing direct care have training in pediatric first aid, including management of a blocked airway and rescue breathing, as specified in STANDARD I.027.

At least one staff person who has successfully completed training in pediatric first aid, as specified in STANDARD I.027, shall be in attendance at all times and in all places where children are in care. Instances in which at least one staff member shall be certified in CPR include when children are involved in swimming and wading and when at least one child is known to have a specific special health need as determined by that child's physician (such as cardiac arrhythmia) that makes the child more likely than a typical child to require cardiac resuscitation. In each case of a child with a special health need, the child care provider shall ask the child's physician whether caregivers with skills in the management of a blocked airway and rescue breathing will suffice, or whether caregivers require skills in cardiac resuscitation to meet the particular health needs of the child. Records of successful completion of training in pediatric first aid, as specified in STANDARD I.027, shall be maintained in the files of the facility.

RATIONALE: To ensure the health and safety of children in a child care setting, someone who is qualified to respond to common life-threatening emergencies must be in attendance at all times. A staff trained in pediatric first aid, including management of a blocked airway and rescue breathing, coupled with a facility that has been designed or modified to ensure the safety of children, can mitigate the consequences of injury and reduce the potential for death from life-

threatening conditions. Knowledge of pediatric first aid, including management of a blocked airway and rescue breathing, and the confidence to use these skills, are critically important to the outcome of an emergency situation.

The need for cardiac resuscitation is rare. Children who have specific cardiac problems, such as cardiac arrhythmia, or children who are drowning in cold water, require cardiac resuscitation. Except in these two instances, cessation of cardiac function does not occur until respiratory failure causes irreversible and devastating brain damage. Therefore, except in these two instances, caregivers require respiratory resuscitation skills, not CPR skills.

Small family child care home providers often work alone and are solely responsible for the health and safety of children in care. They must have the necessary skills to manage any emergency while caring for all the children in the group.

In a study of incidence of injuries in centers, first aid was sufficient treatment for the majority of incidents (1). In a survey of over 2,000 child care programs in North Carolina, 16% had used first aid for choking, 2.3% had used rescue breathing, and only 1% had used CPR during the preceding 36 months of the survey. The authors of this report felt that maintaining CPR training and certification was difficult and probably not cost-effective (3). Minor injuries are common. For emergency situations that require attention from a health professional, first aid procedures can be taken to control the situation until a medical professional can provide definitive care.

Documentation of current certification in the facility assists in implementing and in monitoring for proof of compliance.

COMMENTS: Preparation of the first edition of this document included an extensive discussion of whether the staff should have cardiac resuscitation skills for children.

Many people use the term "CPR" as shorthand for resuscitation and rescue skills. In discussions with the American Academy of Pediatrics' liaison to the American Heart Association pediatric resuscitation

committee, this issue was discussed again during the preparation of this edition of the Standards, with the same conclusion related to limited circumstances where CPR training should be required. Ongoing education about the difference between training in pediatric first aid that includes management of a blocked airway and rescue breathing and training in CPR will be necessary because of the public's familiarity with and use of the term "CPR."

CPR training for cardiac resuscitation involves specific courses focused on pulmonary and cardiac resuscitation, not first aid for other, more common injuries. Evaluations of retention of the techniques taught in CPR courses reportedly reveals poor recall within months after completion. The time and other resources required to provide pediatric CPR training could be better spent on learning first aid, including management of a blocked airway and rescue breathing, and other types of training. CPR training for management of adult cardiac emergencies is valuable and appropriate as a staff and community health goal, but as described above, such training is not a standard of practice for routine child care.

For each child with a special health need, the child care health form should have a check-off box or a request for notification about whether caregivers with skills in management of a blocked airway and rescue breathing will suffice, or does the child have a greater risk than a typical child to require cardiac resuscitation. This proactive approach will alert the child's clinician to consider the need for caregivers to acquire cardiac resuscitation skills on a case-by-case basis. If the child's clinician indicates that the child's condition might require that caregivers provide cardiac resuscitation, CPR training should be required for staff who care for the child. Instead of CPR training for all staff in child care, this focused approach is more likely to insure the safety of the few children for whom CPR might be required.

For additional information on first aid and CPR, see STANDARD 2.027, on pediatric first aid training requirements; STANDARD 1.028, which requires staff to have CPR training for activities involving swimming or wading; and RECOMMENDATION 9.038 through RECOMMENDATION 9.040, on state and local training and technical assistance.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 1.027 TOPICS COVERED IN FIRST AID TRAINING

Management of a blocked airway and rescue breathing comprise two of the core elements of pediatric first aid training. In addition, the course must present an overview of the Emergency Medical Services (EMS), accessing EMS, safety at the scene, and isolation of body substances, and the first aid instruction that is offered shall include, but not be limited to, recognition and first response of pediatric emergency management in a child care setting of the following situations:

- a) Abrasions and lacerations;
- b) Bleeding, including nosebleeds;
- c) Burns;
- d) Fainting;
- e) Poisoning, including swallowed, contact, and inhaled;
- f) Puncture wounds, including splinters;
- g) Injuries, including insect, animal, and human bites;
- h) Shock;
- i) Convulsions or nonconvulsive seizures;
- j) Musculoskeletal injury (such as sprains, fractures);
- k) Dental and mouth injuries;
- l) Head injuries;
- m) Allergic reactions, including information about when auto-injected epinephrine might be required;
- n) Eye injuries;
- o) Loss of consciousness;
- p) Electric shock;
- q) Drowning;
- r) Heat-related injuries, including heat exhaustion/heat stroke;
- s) Cold injuries;
- t) Moving and positioning injured/ill persons;
- u) Management of a blocked airway and rescue breathing for infants and children with return demonstration by the learner;
- v) Illness-related emergencies (such as stiff neck, inexplicable confusion, sudden onset of blood-red or purple rash, severe pain, temperature of 105 degrees F or higher, or looking/acting severely ill); Standard Precautions;

- w) Organizing and implementing a plan to meet an emergency for any child with a special health care need;
- x) Addressing the needs of the other children in the group while managing emergencies in a child care setting.

RATIONALE: First aid for children in the child care setting requires a more child-specific approach than standard adult-oriented first aid offers. To ensure the health and safety of children in a child care setting, someone who is qualified to respond to common injuries and life-threatening emergencies must be in attendance at all times. A staff trained in pediatric first aid, including management of a blocked airway and rescue breathing, coupled with a facility that has been designed or modified to ensure the safety of children, can reduce the potential for death and disability. Knowledge of pediatric first aid, including management of a blocked airway and rescue breathing, and the confidence to use these skills, are critically important to the outcome of an emergency situation.

Small family child care home providers often work alone and are solely responsible for the health and safety of children in care. Such providers must have pediatric first aid competence.

COMMENTS: Usually, other children will have to be supervised while the injury is managed. Parental notification and communication with emergency medical services must be carefully planned. First aid information can be obtained from the American Academy of Pediatrics (AAP) and the American Heart Association (AHA). Contact information for the AAP and the AHA is located in Appendix BB.

For discussion of the need for training in CPR, see STANDARD 1.026.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 5.093 FIRST AID KITS

The facility shall maintain at least one readily available first aid kit wherever children are in care, including one for field trips and outings away from the facility and one to remain at the facility if all the children do not attend the field trip. In addition, a first aid kit shall be in each vehicle that is used to transport children to and from a child care center. Each kit shall be a closed container for storing first aid supplies, accessible to child care staff members at all times but out of reach of children. First aid kits shall be restocked after use, and an inventory shall be conducted at least monthly. The first aid kit shall contain at least the following items:

- a) Disposable nonporous gloves;
- b) Scissors;
- c) Tweezers;
- d) A non-glass thermometer to measure a child's temperature;
- e) Bandage tape;
- f) Sterile gauze pads;
- g) Flexible roller gauze;
- h) Triangular bandages;
- i) Safety pins;
- j) Eye dressing;
- k) Pen/pencil and note pad;
- l) Syrup of ipecac (use only if recommended by the Poison Control Center);
- m) Cold pack;
- n) Current American Academy of Pediatrics (AAP) standard first aid chart or equivalent first aid guide;
- o) Coins for use in a pay phone;
- p) Water;
- q) Small plastic or metal splints;
- r) Liquid soap;
- s) Adhesive strip bandages, plastic bags for cloths, gauze, and other materials used in handling blood;
- t) Any emergency medication needed for child with special needs;
- u) List of emergency phone numbers, parents' home and work phone numbers, and the Poison Control Center phone number.

RATIONALE: Facilities must place emphasis on safeguarding each child and ensuring that the staff members are able to handle emergencies. In a study that reviewed 423 injuries, first aid was sufficient

treatment for 84.4% of the injuries (125). The supplies needed for pediatric first aid, including rescue breathing and management of a blocked airway must be available for use where the injury occurs.

COMMENTS: Many centers simply leave a first aid kit in all vehicles used to transport children, regardless of whether the vehicle is used to take a child to or from a center, or for outings. Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 1.031 TRAINING OF STAFF WHO HANDLE FOOD

All staff members with food handling responsibilities shall obtain training in food service. The director of a center or a large family child care home or the designated supervisor for food service shall obtain certification equivalent to the Food Service Manager's Protection (Sanitation) certificate.

RATIONALE: Outbreaks of foodborne illness have occurred in many settings, including child care facilities. Some of these outbreaks have led to fatalities and severe disabilities. Young children are particularly susceptible to foodborne illness. Because large centers serve more meals daily than many restaurants do, the supervisors of food handlers in these settings should have successfully completed food service certification, and the food handlers in these settings should have successfully completed courses on appropriate food handling.

COMMENTS: Sponsors of the Child and Adult Care Food Program provide this training for some small family child care home providers. For training in food handling, contact the regional office of the Food and Drug Administration, health departments, or the delegate agencies that handle nutrition and environmental health inspection programs. Contact information is located in Appendix BB. Other sources are US Department of Agriculture

(USDA) publications, family child care associations, resource and referrals, and licensing agencies.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 1.032 CHILD ABUSE EDUCATION

Caregivers shall use child abuse prevention education materials provided by the licensing agency, state and national organizations, or from other community agencies such as local branches of the National Committee to Prevent Child Abuse, to educate and establish child abuse prevention and recognition measures for the children, caregivers, and parents. The education and prevention shall address physical, sexual, and psychological or emotional abuse, injury prevention, the dangers of shaking infants and toddlers, as well as signs and symptoms of sexually transmitted diseases. Child care directors and head teachers shall participate in training to recognize visible signs of child abuse, including pattern marks, bruises in unusual locations, pattern or immersion burns, shaken baby syndrome, and behaviors suggesting sexual abuse. They shall know how to refer children with vaginal, penile, or rectal discharge or bleeding to their health provider. A child care provider shall refer the child to the local child protection agency for any reasonable suspicion of child abuse or neglect.

Caregivers shall be trained in compliance with their state's child abuse reporting laws.

RATIONALE: Centers and large and small family child care homes are strategic locations in which to distribute materials for the prevention of abuse and also for indicators of sexually transmitted diseases. The medical diagnosis of child physical and sexual abuse is complex. However, education about the physical manifestations of abuse can increase the number of appropriate referrals to physicians and child protection agencies.

COMMENTS: All caregivers should learn about the mandated reporting requirements for caregivers, the process for follow-up after making a report, and the

protection and exposure of mandated reporters under the state's child abuse law. States and child care providers will select appropriate material from the many available media that can be used in child abuse prevention activities.

Child abuse materials designed for medical audiences may not be suitable for child care training because the photographs in them contain shocking images. Selective use of photographs that help caregivers recognize signs of physical abuse, however, is appropriate.

Resources are available from the American Academy of Pediatrics, the National Clearinghouse on Child Abuse and Neglect Information, and the National Committee for Prevention of Child Abuse. Contact information is located in Appendix BB.

TYPE OF FACILITY: Center; Large Family Child Care Home; Small Family Child Care Home

STANDARD I.033 TRAINING ON OCCUPATIONAL RISK RELATED TO HANDLING BODY FLUIDS

The director of a center or a large family child care home caregiver shall ensure that all staff members who are at risk of occupational exposure to blood or other blood-containing body fluids will be offered hepatitis B immunizations and will receive annual training in Standard Precautions. Training shall be consistent with applicable standards of the Occupational Safety and Health Administration (OSHA Standard 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens") and local occupational health requirements and shall include, but not be limited to:

- a) Modes of transmission of bloodborne pathogens;
- b) Standard Precautions;
- c) Hepatitis B vaccine, pre-exposure, or post-exposure within 24 hours;
- d) Program policies and procedures regarding exposure to blood/body fluid;
- e) Reporting procedures under the exposure control plan to ensure that all first-aid incidents involving exposure are reported to

the employer before the end of the work shift during which the incident occurs.

RATIONALE: Providing first aid in situations where blood is present is an intrinsic part of a caregiver's job. Split lips, scraped knees and other minor injuries associated with bleeding are common in child care. Regarding the applicability of the OSHA standard to child care, Patricia K. Clark, Director of the Directorate of Compliance Assistance stated:

"One of the central provisions of the OSHA standard on bloodborne pathogens is that employers are responsible for determining which job classifications or specific tasks and procedures are reasonably anticipated to result in worker contact with blood or other potentially infectious materials (OPIM). The standard relates coverage to occupational exposure, regardless of where that exposure may occur, since the risk of infection with bloodborne pathogens is dependent on the likelihood of exposure to blood or OPIM regardless of the particular job title or place of employment. If it is determined that a child care worker has occupational exposure, as defined by the standard, then that employee is covered by all sections of the standard including training, vaccination, personal protective equipment, and so forth."

Child care workers who are designated as responsible for rendering first aid or medical assistance as part of their job duties are covered by the scope of this standard.

COMMENTS: OSHA has model exposure control plan materials for use by child care facilities. Using the model exposure control plan materials, child care providers can prepare a plan to comply with the OSHA requirements. The model plan materials are available from regional offices of OSHA. Contact information for OSHA is located in Appendix BB.

TYPE OF FACILITY: Center; Large Family Child Care Home

STANDARD 2.061 HEALTH EDUCATION TOPICS

Health education for children and staff shall include physical, oral, mental/emotional, nutritional, and social health and shall be integrated daily in the program of activities, to include such topics as:

- a) Body awareness;
- b) Families (including cultural heritage);
- c) Personal/social skills;
- d) Expression of feelings;
- e) Self-esteem;
- f) Nutrition;
- g) Personal hygiene;
- h) Safety (such as home, vehicular care seats and belts, playground, bicycle, fire, and firearms);
- i) Conflict management and violence prevention;
- j) First aid;
- k) Physical health;
- l) Handwashing;
- m) Awareness of special needs;
- n) Importance of rest and sleep;
- o) Fitness;
- p) Oral health;
- q) Health risks of secondhand smoke;
- r) Taking medications;
- s) Dialing 911 for emergencies.

RATIONALE: For young children, health and education are inseparable. Children learn about health and safety by experiencing risk taking and risk control, fostered by adults who are involved with them. Whenever opportunities for learning arise; facilities should integrate education to promote healthy behaviors. Health education should be seen not as a structured curriculum, but as a daily component of the planned program that is part of child development. Certified health education specialists are a good resource for this instruction. The American Association for Health Education (AAHE), the National Commission for Health Education Credentialing, Inc. (NCCHEC), and the State and Territorial Injury Prevention Directors' Association (STIPDA) provide information on this specialty. Contact information for the AAHE, NCCHEC, and STIPDA is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 2.063 STAFF MODELING OF HEALTHY BEHAVIOR

The facility shall require all staff members to model healthy behaviors and attitudes in their contact with children in the facility, including eating nutritious foods, complying with no tobacco use policies, and handwashing protocols.

RATIONALE: Modeling is an effective way of confirming that a behavior is one to be imitated.

COMMENTS: Modeling healthy behavior and attitudes can be specified in the plan as compliance with no tobacco use policies, handwashing protocols, and so forth.

See Policy on Smoking, Tobacco Use, Prohibited Substances, and Firearms, STANDARD 8.038 and STANDARD 8.039. See also Hygiene, STANDARD 3.012 through STANDARD 3.019, on handwashing protocols.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 3.020 SITUATIONS THAT REQUIRE HANDWASHING

All staff, volunteers, and children shall follow the procedure in STANDARD 3.021 for handwashing at the following times:

- a) Upon arrival for the day or when moving from one child care group to another;
- b) Before and after:
 - Eating, handling food, or feeding a child;
 - Giving medication;
 - Playing in water that is used by more than one person.
- c) After:
 - Diapering;
 - Using the toilet or helping a child use a toilet;
 - Handling bodily fluid (mucus, blood, vomit), from sneezing, wiping and blowing noses, from mouths, or from sores;

- Handling uncooked food, especially raw meat and poultry;
- Handling pets and other animals;
- Playing in sandboxes;
- Cleaning or handling the garbage.

RATIONALE: Handwashing is the most important way to reduce the spread of infection. Many studies have shown that unwashed or improperly washed hands are the primary carriers of infections. Deficiencies in handwashing have contributed to many outbreaks of diarrhea among children and caregivers in child care centers (126).

In child care centers that have implemented a handwashing training program, the incidence of diarrheal illness has decreased by 50% (127). One study found that handwashing helped to reduce colds when frequent and proper handwashing practices were incorporated into a child care center's curriculum (127, 128, 129).

Good handwashing after playing in sandboxes will help prevent ingesting zoonotic parasites that could be present in contaminated sand and soil (131).

Thorough handwashing with soap for at least 10 seconds using comfortably warm, running water, (no less than 60 degrees F and no more than 120 degrees F) removes organisms from the skin and allows them to be rinsed away (130). Handwashing is effective in preventing transmission of disease.

Washing hands after eating is especially important for children who eat with their hands, to decrease the amount of saliva (which may contain organisms) on their hands. Illnesses may be spread in a variety of ways:

- In human waste (urine, stool);
- In body fluids (saliva, nasal discharge, secretions from open injuries; eye discharge, blood);
- Cuts or skin sores;
- By direct skin-to-skin contact;
- By touching an object that has germs on it;
- In drops of water, such as those produced by sneezing and coughing, that travel through the air.

Since many infected people carry communicable diseases without having symptoms and many are

contagious before they experience a symptom, staff members need to protect themselves and the children they serve by carrying out hygienic procedures on a routine basis (129).

Animals, including pets, are a source of infection for people, and people may be a source of infection for animals (132).

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 3.021 HANDWASHING PROCEDURE

Children and staff members shall wash their hands using the following method:

- Check to be sure a clean, disposable paper (or single-use cloth) towel is available.
- Turn on warm water, no less than 60 degrees F and no more than 120 degrees F, to a comfortable temperature.
- Moisten hands with water and apply liquid soap to hands.
- Rub hands together vigorously until a soapy lather appears, and continue for at least 10 seconds. Rub areas between fingers, around nailbeds, under fingernails, jewelry, and back of hands.
- Rinse hands under running water, no less than 60 degrees F and no more than 120 degrees F, until they are free of soap and dirt. Leave the water running while drying hands.
- Dry hands with the clean, disposable paper or single use cloth towel.
- If taps do not shut off automatically, turn taps off with a disposable paper or single use cloth towel.
- Throw the disposable paper towel into a lined trash container; or place single-use cloth towels in the laundry hamper; or hang individually labeled cloth towels to dry. Use hand lotion to prevent chapping of hands, if desired.

RATIONALE: Running water over the hands removes soil, including infection-causing organisms. Wetting the hands before applying soap helps to create a lather that can loosen soil. The soap lather loosens soil and brings it into solution on the surface of the

skin. Rinsing the lather off into a sink removes the soil from the hands that the soap brought into solution. Warm water, no less than 60 degrees F and no more than 120 degrees F, is more comfortable than cold water; using warm water promotes adequate rinsing during handwashing (130).

Children and staff members should use liquid soap. Although adequately drained bar soap has not been incriminated in transmission of bacteria; bar soaps sitting in water have been shown to be heavily contaminated with *Pseudomonas* and other bacteria. Many children do not have the dexterity to handle a bar of soap. Many adults and children do not take the time to rinse the soil they have applied to the soap bar before putting down the soap bar.

By using a paper towel to turn off the water faucet, people who have just completed handwashing prevent recontamination of their hands.

COMMENTS: Premoistened cleansing towelettes do not effectively clean hands and should not be used as a substitute for washing hands with soap and running water. When running water is unavailable, such as during an outing, towelettes may be used as a temporary measure until hands can be washed under running water. Antibacterial soaps may be used but are not required.

Water basins should not be used as an alternative to running water. If running water from an approved central plumbing source is unavailable, the staff should use a large container fitted with a spigot and fill it daily with a supply of safe water to run water over the hands, which are held above a water basin as a temporary measure. Camp sinks and portable commercial sinks with foot or hand pumps dispense water as for a plumbed sink and are satisfactory if filled with fresh water daily. The staff should clean and disinfect the water reservoir container and water catch basin daily. Outbreaks of disease have been linked to shared wash water and wash basins.

Single-use towels can be used. Shared cloth towels can transmit infectious disease. Even though a child may use a cloth towel that is solely for that child's use, preventing shared use of towels is difficult. Disposable towels prevent this problem, but once used, must be

discarded. Many communicable diseases can be prevented through appropriate hygiene and sanitation. Taps that turn off automatically or those that can be turned off without using hands avoid the recontamination problem.

The use of cloth roller towels is not recommended for the following reasons:

- a) Children often use cloth roll dispensers improperly, resulting in more than one child using the same section of towel.
- b) Incidents of accidental strangulation have been reported (oral communication, U.S. Consumer Product Safety Commission Data Office, September 2000).

For additional information, see *Keeping Healthy*, available from the National Association for the Education of Young Children (NAEYC) and *The ABC's of Safe and Healthy Child Care* available from the Centers for Disease Control and Prevention (CDC). Contact information located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 2.064 HEALTH EDUCATION TOPICS FOR STAFF

Health education for staff shall include physical, oral, mental/emotional, nutritional, and social health of children. At a minimum, the topics shall include those listed in STANDARD 2.061.

RATIONALE: Children learn about health and safety by experiencing risk taking and risk control, fostered and managed by adults. Whenever opportunities for learning arise, facilities should integrate health education to promote healthy behaviors. Health education should be seen not as a structured curriculum, but instead, as a daily component of the planned program that is part of child development.

COMMENTS: Community resources could provide written health-related materials. Consultation can be sought from a certified health education specialist.

Small and large family child care home providers can cover physical, oral, mental, and social health on an informal basis, as the small size of the homes and the varied ages of the enrollees preclude a "curriculum" per se.

The American Association for Health Education (AAHE) and the National Commission for Health Education Credentialing, Inc. (NCCHEC) provide information on certified health education specialists. Contact information for the AAHE and NCCHEC is located in Appendix BB. For additional information on health education for staff, see also Training, STANDARD 1.023 through STANDARD 1.036, for a comprehensive description of staff training topics. See Health Education for Children for topics, STANDARD 2.061.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 3.026 PREVENTION OF EXPOSURE TO BLOOD AND BODILY FLUIDS

Child care facilities shall adopt a modified version of Standard Precautions developed for use in hospitals by The Centers for Disease Control and Prevention as defined in this standard and as may be recommended by the Centers for Disease Control and Prevention for child care settings in the future. This modified version of Standard Precautions shall be used to handle potential exposure to blood, including the blood-containing body fluids and tissue discharges, and to handle other potentially infectious fluids.

In child care settings, exceptions to Standard Precautions as defined by the Centers for Disease Control and Prevention for hospital settings shall include:

- a) Use of non-porous gloves is optional unless blood or blood containing body fluids may be involved. Gloves are not required for feeding human milk or cleaning up of spills of human milk.
- b) Gowns and masks are not required.
- c) Sufficient barriers include materials such as disposable diaper table paper that is moisture resistant, and non-porous gloves.

The staff shall be educated regarding routine precautions to prevent transmission of bloodborne pathogens before beginning to work in the facility and at least annually thereafter. The staff training shall comply with requirements of the Occupational Safety and Health Administration (OSHA), where applicable.

Procedures for Standard Precautions shall include:

- a) Surfaces that may come in contact with potentially infectious body fluids must be disposable or of a material that can be sanitized. Use of materials that can be sterilized is not required.
- b) The staff shall use barriers and techniques that:
 - 1) Minimize potential contact of mucous membranes or openings in skin to blood or other potentially infectious body fluids and tissue discharges and
 - 2) Reduce the spread of infectious material within the child care facility.

Such techniques include avoiding touching surfaces with potentially contaminated materials unless those surfaces are sanitized before further contact occurs with them by other objects or individuals.
- c) When spills of body fluids, urine, feces, blood, saliva, nasal discharge, eye discharge, injury or tissue discharges, and human milk occur, these spills shall be cleaned up immediately, and further managed as follows:
 - 1) For spills of vomit, urine, human milk, and feces, all floors, walls, bathrooms, tabletops, toys, kitchen counter tops, and diaper-changing tables in contact shall be cleaned and sanitized as for the procedure for diaper changing tables in STANDARD 3.014, Step 7.;
 - 2) For spills of blood or other potentially infectious body fluids, including injury and tissue discharges, the area shall be cleaned and sanitized. Care shall be taken to avoid splashing any contaminated materials onto any mucus membrane (eyes, nose, mouth);
 - 3) Blood-contaminated material and diapers shall be disposed of in a plastic bag with a secure tie.
 - 4) Floors, rugs and carpeting that have been contaminated by body fluids shall be cleaned by blotting to remove the fluid as quickly as possible, then sanitized by spot-cleaning with a detergent-disinfectant, and

shampooing, or steam-cleaning the contaminated surface.

RATIONALE: Some children and adults may unknowingly be infected with HIV or other infectious agents, such as hepatitis B virus, as these agents may be present in blood or body fluids (26, 28). Thus, the staff in all facilities should adopt Standard Precautions for all blood spills. Bacteria and viruses carried in the blood, such as hepatitis B, pose a small but specific risk in the child care setting (25). Blood and body fluids containing blood (such as watery discharges from injuries) pose the highest potential risk, because bloody body fluids contain the highest concentration of viruses. In addition, hepatitis B virus can survive in dried state in the environment for at least a week and perhaps even longer. Some other body fluids such as saliva contaminated with blood or blood-associated fluids may contain live virus (such as hepatitis B virus) but at lower concentrations than are found in blood itself. Other body fluids, including urine and feces, do not pose a risk with these bloodborne diseases unless they are visibly contaminated with blood, although these fluids do pose a risk with other infectious diseases.

Gloves are used mainly when people knowingly contact or suspect they may contact blood or blood-containing body fluids, including blood-containing tissue or injury discharges. These fluids may contain the viruses that transmit HIV, hepatitis B, and hepatitis C. While human milk (breast milk) can be contaminated with blood from a cracked nipple, the risk of transmission of infection to caregivers who are feeding expressed human milk is very low. Wearing of gloves to feed or clean up spills of expressed human milk is unnecessary, but caregivers with open cuts on their hands should avoid getting expressed human milk on their hands, especially if they have any open skin or sores on their hands.

During the preparation of the 2nd edition of *Caring for Our Children*, the Steering Committee consulted several experts on the issue of precautions required for handling of human milk. Published policies confirm a clear consensus that gloves are not required for feeding human milk. Although the issue of use of gloves for clean up of human milk spills has not been addressed in previously published policies or in peer-

reviewed literature, the Steering Committee could find no persuasive evidence that the risk involved in cleaning up spills is sufficient to require the use of gloves for human milk spills in child care settings.

Touching a contaminated object or surface may spread illnesses. Many types of infectious germs may be contained in human waste (urine, feces) and body fluids (saliva, nasal discharge, tissue and injury discharges, eye discharges, blood). Because many infected people carry communicable diseases without having symptoms, and many are contagious before they experience a symptom, staff members need to protect themselves and the children they serve by carrying out sanitation procedures on a routine basis. Education of the staff regarding cleaning procedures can reduce the occurrence of illness in the group of children with whom they work (26, 28).

Prior to using a bleach solution to sanitize, clean any visible soil from the surface with a detergent and rinse well with water. By itself, bleach is not a good cleaning agent. Two minutes of contact with a solution of ¼ cup household liquid chlorine bleach in one gallon of tap water prepared fresh daily is an effective method of surface-sanitizing of environmental surfaces and other inanimate objects that have first been thoroughly cleaned of organic soil (26, 27, 29). Domestic bleach is sold in the conventional strength of 5.25% hypochlorite and a more recently marketed “ultra” bleach product that contains 6% hypochlorite solution. The recommended 1:64 dilution of 1/4 cup of domestic bleach to 1 gallon of water (or 1 tablespoon to 1 quart of water) produces a solution that contains 500-800 parts per million of available chlorine. Unpublished tests by Chlorox shows 2 minutes of contact on a visibly clean surface that has been coated with a spray of a 1:64 dilution of household bleach, kills most disease-causing organisms on that surface. Air-drying is fine, since chlorine evaporates when the solution dries. If the surface is to be wiped dry, wait for the 2 minute contact time to elapse first. Industrially prepared detergent-sanitizer solutions or detergent cleaning, rinsing and application of a non-bleach sanitizer is acceptable as long as these products are non-toxic for children and are used according to the manufacturer's instructions.

Cleaning and sanitizing rugs and carpeting that have been contaminated by body fluids is challenging. Extracting as much of the contaminating material as possible before it penetrates the surface to lower layers helps to minimize this challenge. Cleaning and sanitizing the surface without damaging it requires use of special cleaning agents designed for use on rugs, or steam cleaning.

Requirements of the OSHA for a facility plan and annual training of staff members who may be exposed to blood as a condition of their employment apply to child care workers who are employees.

COMMENTS: The Region III office of OSHA developed a model plan for child care facilities. Filling in the blanks in this model plan is easier than starting from scratch to write a conforming plan. The sanctions for failing to comply with OSHA requirements can be costly, both in fines and in health consequences. Child care providers should take the necessary steps to meet OSHA requirements. Regional offices of OSHA are listed with other federal agencies in the telephone directory.

Either single-use disposable gloves or utility gloves should be used. Single-use disposable gloves should be used only once and then discarded immediately without being handled. If utility gloves are used, they should be cleaned after every use with soap and water and then dipped in bleach solution up to the wrist. The gloves should then be taken off and hung to dry. The utility gloves should be worn, not handled, during this cleaning and sanitizing procedure.

Staff who wear gloves must be mindful that the wearing of gloves does not prevent contamination of their hands or of surfaces touched with contaminated gloved hands. Handwashing and sanitizing of contaminated surfaces is still required even when gloves are used.

For the proper technique for removing gloves, see Appendix D.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.02 I STAFF EDUCATION AND POLICIES ON CYTOMEGALOVIRUS (CMV)

Facilities that employ women of childbearing age shall educate these workers with regard to the following:

- a) The increased probability of exposure to cytomegalovirus (CMV) in the child care setting;
- b) The potential for fetal damage when CMV is acquired during pregnancy;
- c) Hygiene measures (especially handwashing and avoiding contact with urine, saliva, and nasal secretions) aimed at reducing the acquisition of CMV;
- d) The availability of counseling and testing for serum antibody to CMV to determine the child care provider's immune status.

Female employees of childbearing age shall be referred to their personal health care providers or to the health department authority for counseling about their risk of cytomegalovirus (CMV) infection. This counseling may include testing for serum antibodies to CMV to determine the employee's immunity against CMV infection.

RATIONALE: CMV is the leading cause of congenital infection in the United States, with approximately 1% of live born infants infected prenatally (79). While most infected fetuses escape resulting illness or disability, 10 to 20 percent will have hearing loss, mental retardation, cerebral palsy, or vision disturbances. Although maternal immunity does not prevent congenital CMV infection, evidence indicates that initial acquisition of CMV during pregnancy (primary maternal infection) carries the greatest risk for resulting illness or disability of the fetus (79).

Children enrolled in child care facilities are more likely to acquire CMV than are children cared for at home. Epidemiologic data, as well as laboratory testing of viral strains, has provided evidence for child-to-child transmission of CMV in the child care setting (79). Rates of CMV excretion have varied among facilities and even between class groups within a facility. Children between 1 and 3 years of age have the highest rates of excretion; published studies report rates between 20 to 80 percent in this age group. Children who acquire CMV from a maternal source or in a facility may continue to excrete the virus for years (80). Thus, it is reasonable to conclude that child care staff members are more likely to come into contact with CMV-excreting children than are

individuals in any other known situation or occupation.

Epidemiologic data and study of CMV strains have shown that premature newborn infants who acquire CMV in the nursery can transmit the virus to their parents (81). Moreover, parents of children attending centers have a higher rate of development of antibodies to CMV than parents of children kept at home (82). Parental infection with CMV is related to the child's CMV excretion (81, 82, 83).

With regard to child-to-staff transmission, studies have shown a high rate of infection with CMV among child care workers with annual rates ranging from 14 to 20 percent (84, 85, 86). Therefore, exposure to CMV with the higher rate of acquisition that occurs in child care staff will most likely lead to a higher rate of gestational CMV infection in staff members without antibodies to CMV and an increased rate of congenital CMV infection in their offspring (79). Women who have antibodies to CMV can be reassured that their risk of having an infant damaged by congenital CMV infection is low.

With current knowledge on the risk of CMV infection in child care staff members and the potential consequences of gestational CMV infection, child care staff members should receive counseling in regard to the risks.

COMMENTS: Assays for measuring antibody to CMV are available commercially and seem to perform well when used by qualified laboratories. They are accepted for screening blood products, transfusion recipients, and organ donors and recipients.

For additional information regarding CMV, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.024 STAFF EDUCATION AND POLICIES ON ENTERIC (DIARRHEAL) AND HAV INFECTIONS

Facilities shall adhere to the following staff educational policies to prevent and control

infections of the gastrointestinal tract (mainly diarrhea) or liver:

- a) The facility shall conduct ongoing continuing education for staff members, to include the following:
 - 1) Methods of transmission of pathogens that cause diarrhea and hepatitis A virus;
 - 2) Recognition and prevention of diarrhea and disease associated with hepatitis A virus infection;
- b) All caregivers, food handlers, and maintenance staff shall receive ongoing education and monitoring concerning handwashing and cleaning of environmental surfaces as specified in the facility's plan. See STANDARD 3.020 through STANDARD 3.023, on handwashing; and STANDARD 3.028 through STANDARD 3.040, on sanitation, disinfection, and maintenance;
- c) At least annually, the director shall review all procedures related to preventing diarrhea and hepatitis A virus infections. Each caregiver, food handler, and maintenance person shall review a written copy of these procedures or view a video, which shall include age-specific criteria for inclusion and exclusion of children who have a diarrheal illness or hepatitis A virus infection and infection control procedures. See *Child Inclusion/Exclusion/Dismissal*, STANDARD 3.065 through STANDARD 3.068;
- d) Guidelines for administration of immune globulin and immunization against hepatitis A virus shall be enforced to prevent infection in contacts of children with hepatitis A disease (87, 99).

RATIONALE: Staff training in hygiene and monitoring of staff compliance have been shown to reduce the spread of diarrhea (94, 97, 98, 100). These studies suggest that training combined with outside monitoring of child care practices can modify staff behavior as well as the occurrence of disease.

Child care providers should observe children for signs of disease to permit early detection and implementation of control measures. Facilities should consult the local health department to determine whether the increased frequency of diarrheal illness requires public health intervention.

COMMENTS: For additional information regarding enteric (diarrheal) and hepatitis A virus (HAV) infections, consult the *Red Book* from the American

Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.029 STAFF EDUCATION ON PREVENTION OF BLOODBORNE DISEASES

All caregivers shall receive regular training on how to prevent transmission of bloodborne diseases, including hepatitis B virus (HBV).

RATIONALE: Efforts to reduce the risk of transmitting diseases in child care through hygienic and environmental standards in general should focus primarily on blood precautions and ensuring that children are appropriately immunized against hepatitis B virus.

COMMENTS: For additional information regarding HBV infections, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB. also Continuing Education, STANDARD 1.029 through STANDARD 1.033.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.035 STAFF EDUCATION ABOUT PREVENTING TRANSMISSION OF HIV INFECTION

Caregivers shall be knowledgeable about routes of transmission and about prevention of transmission of bloodborne pathogens, including human immunodeficiency virus (HIV) and shall practice measures recommended by the U.S. Public Health Service for prevention of transmission of these infections.

RATIONALE: Unwarranted fear about HIV transmission in child care should be dispelled. Studies examining transmission of HIV support the concept

that HIV is not a highly infectious agent (107). The major routes of transmission are through sexual contact, through contact with blood or body fluids containing blood, and from mother to child during the birth process. Several studies have shown that HIV-infected persons do not spread the HIV virus to other members of their households except through sexual contact.

HIV has been isolated in low volumes in saliva, urine, and human milk. Transmission of HIV through saliva seems to be uncommon. Cases suggest that contact with blood from an HIV-infected individual is a possible mode of transmission through contact between broken skin and blood or blood-containing fluids. Theoretically, biting is a possible mode of transmission of bloodborne illness, such as HIV infection. However, the risk of such transmission is believed to be rare. If a bite results in blood exposure to either person involved, the U.S. Public Health Service recommends postexposure follow-up, including consideration of postexposure prophylaxis (112).

COMMENTS: For additional information regarding HIV, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB. See STANDARD 1.029 through STANDARD 1.033, on Continuing Education and STANDARD 3.026 and STANDARD 3.027, on the prevention of exposure to blood.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 8.022 WRITTEN PLAN AND TRAINING FOR HANDLING URGENT MEDICAL CARE OR THREATENING INCIDENTS

The facility shall have a written plan for reporting and managing any incident or unusual occurrence that is threatening to the health, safety, or welfare of the children, staff, or volunteers. The facility shall also include procedures of staff training on this plan.

The following incidents, at a minimum, shall be addressed in the plan:

- a) Lost or missing child;

- b) Suspected sexual, physical, or emotional abuse or neglect of a child (as mandated by state law);
- c) Injuries requiring medical or dental care;
- d) Serious illness requiring hospitalization, or the death of a child or caregiver, including deaths that occur outside of child care hours.

The following procedures, at a minimum, shall be addressed in the plan:

- a) Provision for a caregiver to accompany a child to the source of urgent care and remain with the child until the parent or legal guardian assumes responsibility for the child;
- b) Provision for a backup caregiver or substitute (see Substitutes, STANDARD 1.037 through STANDARD 1.039) for large and small family child care homes to make this feasible. Child:staff ratios must be maintained at the facility during the emergency;
- c) The source of urgent medical and dental care (such as a hospital emergency room, medical or dental clinic, or other constantly staffed facility known to caregivers and acceptable to parents);
- d) Assurance that the first aid kits are resupplied following each first aid incident, and that required contents are maintained in a serviceable condition, by a periodic review of the contents;
- e) Policy for scheduled reviews of staff members' ability to perform first aid for averting the need for emergency medical services.

RATIONALE: Emergency situations are not conducive to calm and composed thinking. Drafting a written plan provides the opportunity to prepare and to prevent poor judgments made under the stress of an emergency.

An organized, comprehensive approach to injury prevention and control is necessary to ensure that a safe environment is provided to children in child care. Such an approach requires written plans, policies, procedures, and record-keeping so that there is consistency over time and across staff and an understanding between parents and caregivers about concerns for, and attention to, the safety of children.

Routine restocking of first aid kits is necessary to ensure supplies are available at the time of an emergency.

Management within the first hour or so following a dental injury may save a tooth.

COMMENTS: Parents may also have on file their preferred dentists in case of emergency. Parents should be notified, if at all possible, before dental services are rendered, but emergency care should not be delayed because the child's own dentist is not immediately available.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 8.024 WRITTEN EVACUATION PLAN

The facility shall have a written plan for reporting and evacuating in case of fire, flood, tornado, earthquake, hurricane, blizzard, power failure, bomb threat, or other disaster that could create structural damages to the facility or pose health and safety hazards to the children and staff. The facility shall also include procedures for staff training on this emergency plan.

RATIONALE: Emergency situations are not conducive to calm and composed thinking. Drafting a written plan provides the opportunity to prepare and to prevent poor judgments made under the stress of an emergency. An organized, comprehensive approach to injury prevention and control is necessary to ensure that a safe environment is provided children in child care. Such an approach requires written plans, policies, procedures, rehearsals, and record-keeping so that there is consistency over time and across staff and an understanding between parents and caregivers about concerns for, and attention to, the safety of the children and staff.

COMMENTS: Diagrammed evacuation procedures are easiest to follow in an emergency. Floor plan layouts that show two alternate exit routes are best. Plans should be clear enough that a visitor to the facility could easily follow the instructions. A sample emergency evacuation plan is provided in *Healthy Young Children* from the National Association for the Education of Young Children (NAEYC). Contact information for the NAEYC is located in Appendix BB. See Appendix Y, for a sample *Incident Report Form*.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

USE OF HEALTH CONSULTANTS

STANDARD 1.040 USE OF CHILD CARE HEALTH CONSULTANTS

Each center, large family child care home, and small family child care home network shall use the services of a health consultant qualified to provide advice for child care as defined in STANDARD 1.041. Centers and large and small family child care home providers shall avail themselves of community resources established for health consultation to child care.

RATIONALE: Few child care staff are trained as health professionals and few health professionals have training about the community child care programs. When physical, mental, social, or health concerns are raised for the child or for the family, they should be addressed appropriately, often through consultation with or referral to resources available in the community.

Caregivers need to use health consultants in a variety of fields (such as physical and mental health care, nutrition, environmental safety and injury prevention, oral health care, and developmental disabilities). Health consultants should have specific training in the child care setting (134). Such training is more widely available through efforts such as state programs implementing the Healthy Child Care America Campaign, and national support funded by the Maternal and Child Health Bureau, Health Resources and Services Administration, including the National Resource Center for Health and Safety in Child Care, the national staff of the Healthy Child Care America Campaign at the American Academy of Pediatrics and the National Training Institute for Child Care Health Consultants. Contact information is located in Appendix BB.

In states where health consultation is mandatory, compliance is nearly universal (135).

COMMENTS: A health consultant should be a health professional who has an interest in and experience

with children, has knowledge of resources and regulations, and is comfortable linking health resources with facilities that provide primarily education and social services. State regulatory agencies should maintain or contract for the maintenance of a registry of health consultant resources in the community. For example, in Pennsylvania, the PA Chapter of the American Academy of Pediatrics (AAP) maintains and provides training and support for health professionals in such a registry under contracts with the child care regulatory agency and the state department of health. Additional registries are being developed by the National Resource Center for Health and Safety in Child Care, Healthy Child Care America Campaign from the Maternal and Child Health Bureau, Health Resources and Services Administration, and the National Training Institute for Child Care Health Consultants. Child care health consultants may be employed by public or non-profit agencies such as health departments or resource and referral agencies, other health institutions, or may work as independent health consultants. Caregivers also should not overlook health professionals with pediatric and health consultant experience who are parents of children enrolled in their facility. However, involving parents as health consultants requires caution to avoid crossing boundaries of confidentiality and conflict of interest. To foster access to and accountability of health consultants, some form of compensation should be offered.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 1.041 KNOWLEDGE AND SKILLS OF CHILD CARE HEALTH CONSULTANTS

A facility shall have a health consultant who is a health professional with training and experience as a child care health consultant. Graduate students in a discipline related to child health shall be acceptable as child care health consultants supervised by faculty knowledgeable in child care. A child care health consultant shall either have the full knowledge base and skills required for this

role, or arrange to partner with other health professionals who can provide the necessary knowledge and skills.

The knowledge base of the child care health consultant (personally or by involving other health professionals) shall include:

- a) National health and safety standards for out-of-home child care;
- b) How child care facilities conduct their day-to-day operations;
- c) Child care licensing requirements;
- d) Disease reporting requirements for child care providers;
- e) Immunizations for children;
- f) Immunizations for child care providers;
- g) Injury prevention for children;
- h) Staff health, including occupational health risks for child care providers;
- i) Oral health for children;
- j) Nutrition for children;
- k) Inclusion of children with special health needs in child care;
- l) Recognition and reporting requirements for child abuse and neglect;
- m) Community health and mental health resources for child and parent health.

The skills of the child care health consultant shall include the ability to perform or arrange for performance of the following activities:

- a) Teaching child care providers about health and safety issues;
- b) Teaching parents about health and safety issues;
- c) Assessing child care providers' needs for health and safety training;
- d) Assessing parents' needs for health and safety training;
- e) Meeting on-site with child care providers about health and safety;
- f) Providing telephone advice to child care providers about health and safety;
- g) Providing referrals to community services;
- h) Developing or updating policies and procedures for child care facilities;
- i) Reviewing health records of children;
- j) Reviewing health records of child care providers;
- k) Helping to manage the care of children with special health care needs;
- l) Consulting with a child's health professional about medication;

- m) Interpreting standards or regulations and providing technical advice, separate and apart from the enforcement role of a regulation inspector.

Although the child care health consultant may have a dual role, such as providing direct care to some of the children or serving as a regulation inspector, these roles shall not be mixed with the child care health consultation role.

The child care health consultant shall have contact with the facility's administrative authority, the staff, and the parents in the facility. The administrative authority shall review, respond to, and implement the child care health consultant's recommendations. The child care health consultant shall review and approve the written health policies used by center-based facilities.

Programs with a significant number of non-English-speaking families shall seek a child care health consultant who is culturally sensitive and knowledgeable about community health resources for the parents' native culture and languages.

RATIONALE: The specific health and safety consultation needs for an individual facility depend on the characteristics of that facility (134). All facilities should have an overall child care health consultation.

The special circumstances of group care may not be part of the health professional's usual education. Therefore, child care providers should seek health consultants who have the necessary specialized training or experience. Such training is more readily available now as described in the previous standard.

To be effective, a child care health consultant should know the available resources in the community and should engage in a partnership with the administrative authority for the facility, the staff, and parents in the consultative and policy-setting process. Setting health and safety policies in cooperation with the staff, parents, health professionals, and public health authorities will help ensure successful implementation of a quality program (133).

Health professionals who serve as child care health consultants do not always have a public health perspective or the full range of knowledge and skills

required. Therefore, public health professionals and other health professionals with appropriate training and skills should serve as a resource to inform those who work in the private sector or whose health professional expertise is specialized and lacking in broader knowledge and skills that may be required. For example, while a sanitarian may provide excellent health consultation on hygiene and infectious disease control, another health professional may need to be consulted about medication administration or playground safety. A Certified Playground Safety Inspector would be able to provide consultation about gross motor play hazards, and would not likely be able to provide sound advice about food safety and nutrition.

COMMENTS: The policies and procedures reviewed for approval by child care health consultants should include, but not be limited to, the following:

- a) Admission and readmission after illness, including inclusion/exclusion criteria;
- b) Health evaluation and observation procedures on intake, including physical assessment of the child and other criteria used to determine the appropriateness of a child's attendance;
- c) Plans for health care and management of children with communicable diseases;
- d) Plans for surveillance and management of illnesses, injuries, and problems that arise in the care of children;
- e) Plans for caregiver training and for communication with parents and health care providers;
- f) Policies regarding nutrition, nutrition education, and oral health;
- g) Plans for the inclusion of children with special health needs;
- h) Emergency plans;
- i) Safety assessment of facility playground;
- j) Policies regarding staff health and safety;
- k) Policies for administration of medication.

See Identifiable Governing Body/Accountable Individual, STANDARD 8.001 through STANDARD 8.003, for additional information regarding administrative authority.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD I.042 SPECIALIZED CONSULTATION FOR FACILITIES SERVING CHILDREN WITH DISABILITIES

When children at the facility include those with developmental delay or disabilities, the staff or documented consultants shall include any of the following, with prior informed, written parental consent and as appropriate to each child's needs:

- a) A physician;
- b) A registered dietitian;
- c) A registered nurse or pediatric nurse practitioner;
- d) A psychologist;
- e) A physical therapist;
- f) An occupational therapist;
- g) A speech pathologist;
- h) A respiratory therapist;
- i) A social worker;
- j) A parent of a child with special needs;
- k) The child care provider.

RATIONALE: The range of professionals needed may vary with the facility, but the listed professionals should be available as consultants when needed. These professionals need not be on staff at the facility, but may simply be available when needed through a variety of arrangements, including contracts, agreements, and affiliations. The parent's participation and written consent in the native language of the parent, including Braille/sign language, is required to include outside consultants.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD I.043 FREQUENCY OF CHILD CARE HEALTH CONSULTATION VISITS

The health consultant shall visit each facility as needed to review and give advice on the facility's health component. Center-based facilities that serve any child younger than 2 years of age shall be visited at least once a month by a health professional with general knowledge and skills in child health and safety. Center-based facilities that are not open at least 5 days a week or that serve only children 2 years of age or older shall be

visited at least quarterly, on a schedule that meets the needs of the composite group of children. Small and large family child care homes shall be visited at least annually. Written documentation of health consultant visits shall be maintained at the facility.

RATIONALE: Almost everything that goes on in a facility and almost everything about the facility itself affects the health of the children it serves (136). Infants are particularly vulnerable to injuries, infections, and psychological harm. Their rapid changes in behavior make regular and frequent visits by the health consultant extremely important. In facilities where health and safety problems or a high turnover of staff occurs, more frequent visits by the health consultant should be arranged.

COMMENTS: For health consultants to facilities serving children with special needs, see STANDARD 1.003, STANDARD 1.042, and STANDARD 1.044. For health consultants serving special facilities for children who are ill, see STANDARD 3.075. For nutrition staffing and consultation, see STANDARD 4.026 and STANDARD 4.027. For additional information on health consultants, see Health Consultation, STANDARD 8.020; Consultation Records, STANDARD 8.073, on documentation of health consultant training and visits; and Consultants, RECOMMENDATION 9.033 and RECOMMENDATION 9.034.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 1.044 REGISTERED NURSES TO PROVIDE MEDICAL TREATMENT

Child care facilities shall arrange for a registered nurse to provide staff training and ongoing supervision of the health needs and practices of staff and children and to ensure appropriate administration of medication and prescribed medical treatment if an individual assessment of a child reveals that such services are required.

RATIONALE: An on-site health care professional must be available to assess and manage the needs of children who require medical assistance.

COMMENTS: Small family child care home providers may arrange for the services of a registered nurse on an as-needed consultative basis.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

HEALTH APPRAISALS AND ASSESSMENTS

STANDARD 1.045 PREEMPLOYMENT AND ONGOING ADULT HEALTH APPRAISALS, INCLUDING IMMUNIZATION

All paid and volunteer staff members who work more than 40 hours per month shall have a health appraisal before their first involvement in child care work. Health appraisals shall be required every 2 years thereafter, unless the staff member's health provider recommends that this be done more frequently. If a child care provider works also at a different child care facility, a new health appraisal shall be required if there is a question about the results of the previous health appraisal, 2 years have elapsed since the previous health appraisal, or signs of ill health appear. People who work less than 40 hours per month shall be encouraged to have a health appraisal. The appraisal shall identify any accommodations required of the facility for the staff person to function in his or her assigned position. A statement from the health care provider that an appraisal covering the listed areas was completed, and details about any findings that require accommodation shall be on file at the facility.

Health appraisals for paid and volunteer staff members who work more than 40 hours per month shall include at a minimum:

- a) Health history;
- b) Physical exam;
- c) Dental exam;
- d) Vision and hearing screening;

- e) The results and appropriate follow-up of a tuberculosis (Tb) screening using the Mantoux intradermal skin test, one-step procedure. See STANDARD 6.014;
- f) A review and certification of up-to-date immune status (measles, mumps, rubella, diphtheria, tetanus, polio, varicella, influenza, pneumonia, hepatitis A, and hepatitis B) (118). See Immunizations, STANDARD 3.005 through STANDARD 3.007;
- g) A review of occupational health concerns based on the performance of the essential functions of the job. See Occupational Hazards, STANDARD 1.048; and *Major Occupational Health Hazards*, Appendix B;
- h) Assessment of risk from exposure to common childhood infections, such as parvovirus, CMV, and chickenpox (118, 119);
- i) Assessment of orthopedic, psychological, neurological, or sensory limitations or communicable diseases that require accommodations or modifications for the person to perform tasks that typical adults can do.

All adults who reside in a family child care home who are considered to be at high risk for Tb, and all adults who work less than 40 hours in any month in child care shall have completed Tb screening as specified in STANDARD 6.014. Adults who are considered at high risk for Tb include those who are foreign-born, have a history of homelessness, are HIV-infected, have contact with a prison population, or have contact with someone who has active Tb.

The Tb test of staff members with previously negative skin tests shall not be repeated on a regular basis unless required by the local or state health department. A record of test results and appropriate follow-up evaluation shall be on file in the facility.

All adults who work in child care shall be encouraged to have a full health appraisal.

RATIONALE: Under the Americans with Disabilities Act (ADA), employers are expected to make reasonable accommodations for persons with disabilities. Under ADA, accommodations are based on an individual case by case situation. Undue hardship is defined also on a case by case basis.

Since detection of Tuberculosis using screening of healthy individuals has a low yield compared with screening of contacts of known cases of tuberculosis, routine repeated screening of healthy individuals with previously negative skin tests is not a reasonable use of resources. Since local circumstances and risks of exposure may vary, this recommendation should be subject to modification by local or state health authorities.

Even for young, healthy adults, care of children increases the risk of developing medical problems that can affect the adult's ability to perform on the job. For the protection of the children and adult staff members, a 2-year health appraisal should be considered as minimal surveillance.

Dental decay is transmissible. Bacteria which contribute to dental decay can be transmitted from care - givers to infants. Individuals with active tooth decay are more likely to transmit this bacteria to the children in their care.

COMMENTS: To focus the evaluation by the health professional, child care facilities should provide the job description or list of activities that the staff person is expected to perform. Unless the job description defines the duties of the role specifically, under federal law the facility may be required to adjust the activities of that person. For example, child care facilities typically require the following activities of care-givers:

- a) Moving quickly to supervise and assist young children;
- b) Lifting children, equipment, and supplies;
- c) Sitting on the floor and on child-sized furniture;
- d) Washing hands frequently;
- e) Eating the same food as that served to the children (unless the staff member has dietary restrictions);
- f) Hearing and seeing at a distance required for playground supervision or driving;
- g) Being absent from work for illness no more often than the typical adult, to provide continuity of caregiving relationships for children in child care.

NAEYC's *Healthy Young Children: A Manual for Programs* provides models for an assessment by a health professional. See also *Model Child Care Health Policies*, available from National Association for the

Education of Young Children (NAEYC) and from the American Academy of Pediatrics (AAP). Contact information located in Appendix BB.

Concern about the cost of health exams (particularly when many caregivers do not receive health benefits and earn minimum wage) is a barrier to meeting this standard. When staff members need hepatitis B immunization to meet OSHA requirements, the cost of this immunization may or may not be covered under a managed care contract. If not, the cost of health supervision (such as immunizations, dental and health exams) must be covered as part of the employee's preparation for work in the child care setting by the prospective employee or the employer. Child care workers are among those for whom annual influenza vaccination should be strongly considered.

Facilities should consult with ADA experts through the U.S. Department of Education funded Disability and Business Technical Assistance Centers throughout the country. These centers can be reached by calling 1-800-949-4232 and callers are routed to the appropriate region.

Also see STANDARD 1.045, STANDARD 6.014 and STANDARD 6.015. For a sample child care staff health assessment form, see Appendix E.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 1.046 DAILY STAFF HEALTH ASSESSMENT

On a daily basis, the administrator of the facility or caregiver shall assess (visually and verbally) staff members, substitutes, and volunteers for obvious signs of ill health. Staff members, substitutes, and volunteers shall be responsible for reporting immediately to their supervisor any injuries or illnesses they experience at the facility or elsewhere, especially those that might affect their health or the health and safety of the children. It is the responsibility of the administration, not the ill or injured staff member, to arrange for a substitute provider.

RATIONALE: Sometimes adults report to work when feeling ill or become ill during the day but believe it is their responsibility to stay. The administrator's or care-giver's assessment may prevent the spread of illness.

COMMENTS: Administrators and caregivers need guidelines to ensure proper application of this standard. For a demonstration of how to implement this standard, see the video series, *Caring for Our Children*, available from National Association for the Education of Young Children (NAEYC) and the American Academy of Pediatrics (AAP) (120). Contact information is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 1.047 HEALTH LIMITATIONS OF STAFF

Staff and volunteers must have a health care provider's release to return to work in the following situations:

- a) When they have experienced conditions that may affect their ability to do their job or require an accommodation to prevent illness or injury in child care work related to their conditions (such as pregnancy, specific injuries, or infectious diseases);
- b) After serious or prolonged illness;
- c) When their condition or health could affect promotion or reassignment to another role;
- d) Before return from a job-related injury;
- e) If there are workers' compensation issues or if the facility is at risk of liability related to the employee's or volunteer's health problem;
- f) When there is suspicion of a communicable disease.

If a staff member is found to be unable to perform the activities required for the job because of health limitations, the staff person's duties shall be limited or modified until the health condition resolves or employment is terminated because the facility can prove that it would be an undue hardship to accommodate the staff member with the disability.

RATIONALE: Under the Americans with Disabilities Act (ADA), employers are expected to make reasonable accommodations for persons with disabilities. Under ADA, accommodations are based on an individual case by case situation. Undue hardship is defined also on a case by case basis.

COMMENTS: Facilities should consult with ADA experts through the U.S. Department of Education funded Disability and Business Technical Assistance Centers throughout the country. These centers can be reached by calling 1-800-949-4232 and callers are routed to the appropriate region.

For additional information on health limitations of staff members, see STANDARD 6.030, for staff with acute or chronic hepatitis B (HBV); and STANDARD 6.036, for staff with asymptomatic HIV.

TYPE OF FACILITY: *Center; Large Family Child Care Home*

IMMUNIZATIONS

STANDARD 3.007 IMMUNIZATION OF CHILD CARE PROVIDERS

Child care providers shall be current for all immunizations routinely recommended for adults by the Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention (CDC). All child care providers shall have:

- a) Completed a primary series for tetanus and diphtheria, and shall receive boosters every 10 years;
- b) Been immunized or certified immune by a health care provider against measles, mumps, rubella, poliomyelitis, varicella (chickenpox), and hepatitis B following guidelines of the ACIP (22, 23).

Additionally, influenza immunization is recommended for people 50 years of age and older and pneumococcal polysaccharide vaccine is recommended for people 65 years of age or older.

If a staff member is not appropriately immunized for medical or religious reasons, the child care facility shall require documentation of the reason, in writing.

RATIONALE: Vaccine-preventable infections of adults represent a continuing cause of morbidity and mortality and source of transmission of infectious organisms. Vaccines, which are safe and effective in preventing these diseases, need to be used in adults to minimize disease and to eliminate potential sources of transmission (23, 24)

COMMENTS: For additional information on adult immunization, contact the Centers for Disease Control and Prevention (CDC) or visit the CDC website at www.cdc.gov/. Contact information is located in Appendix BB.

For additional information on vaccine-preventable diseases, see Health Plan for Child Health Services, STANDARD 8.013 through STANDARD 8.017; for additional immunization standards, Pre-employment Staff Health Appraisal, STANDARD 1.045.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 1.045 PREEMPLOYMENT AND ONGOING ADULT HEALTH APPRAISALS, INCLUDING IMMUNIZATION

All paid and volunteer staff members who work more than 40 hours per month shall have a health appraisal before their first involvement in child care work. Health appraisals shall be required every 2 years thereafter, unless the staff member's health provider recommends that this be done more frequently. If a child care provider works also at a different child care facility, a new health appraisal shall be required if there is a question about the results of the previous health appraisal, 2 years have elapsed since the previous health appraisal, or signs of ill health appear. People who work less than 40 hours per month shall be encouraged to have a health appraisal. The appraisal shall identify any accommodations required of the facility for the staff person to function in his or her assigned position. A

statement from the health care provider that an appraisal covering the listed areas was completed, and details about any findings that require accommodation shall be on file at the facility.

Health appraisals for paid and volunteer staff members who work more than 40 hours per month shall include at a minimum:

- a) Health history;
- b) Physical exam;
- c) Dental exam;
- d) Vision and hearing screening;
- e) The results and appropriate follow-up of a tuberculosis (Tb) screening using the Mantoux intradermal skin test, one-step procedure. See STANDARD 6.014;
- f) A review and certification of up-to-date immune status (measles, mumps, rubella, diphtheria, tetanus, polio, varicella, influenza, pneumonia, hepatitis A, and hepatitis B) (118). See Immunizations, STANDARD 3.005 through STANDARD 3.007;
- g) A review of occupational health concerns based on the performance of the essential functions of the job. See Occupational Hazards, STANDARD 1.048; and *Major Occupational Health Hazards*, Appendix B;
- h) Assessment of risk from exposure to common childhood infections, such as parvovirus, CMV, and chickenpox (118, 119);
- i) Assessment of orthopedic, psychological, neurological, or sensory limitations or communicable diseases that require accommodations or modifications for the person to perform tasks that typical adults can do.

All adults who reside in a family child care home who are considered to be at high risk for Tb, and all adults who work less than 40 hours in any month in child care shall have completed Tb screening as specified in STANDARD 6.014. Adults who are considered at high risk for Tb include those who are foreign-born, have a history of homelessness, are HIV-infected, have contact with a prison population, or have contact with someone who has active Tb.

The Tb test of staff members with previously negative skin tests shall not be repeated on a regular basis unless required by the local or state health department. A record of test results and

appropriate follow-up evaluation shall be on file in the facility.

All adults who work in child care shall be encouraged to have a full health appraisal.

RATIONALE: Under the Americans with Disabilities Act (ADA), employers are expected to make reasonable accommodations for persons with disabilities. Under ADA, accommodations are based on an individual case by case situation. Undue hardship is defined also on a case by case basis.

Since detection of Tuberculosis using screening of healthy individuals has a low yield compared with screening of contacts of known cases of tuberculosis, routine repeated screening of healthy individuals with previously negative skin tests is not a reasonable use of resources. Since local circumstances and risks of exposure may vary, this recommendation should be subject to modification by local or state health authorities.

Even for young, healthy adults, care of children increases the risk of developing medical problems that can affect the adult's ability to perform on the job. For the protection of the children and adult staff members, a 2-year health appraisal should be considered as minimal surveillance.

Dental decay is transmissible. Bacteria which contribute to dental decay can be transmitted from care - givers to infants. Individuals with active tooth decay are more likely to transmit this bacteria to the children in their care.

COMMENTS: To focus the evaluation by the health professional, child care facilities should provide the job description or list of activities that the staff person is expected to perform. Unless the job description defines the duties of the role specifically, under federal law the facility may be required to adjust the activities of that person. For example, child care facilities typically require the following activities of care-givers:

- a) Moving quickly to supervise and assist young children;
- b) Lifting children, equipment, and supplies;
- c) Sitting on the floor and on child-sized furniture;

- d) Washing hands frequently;
- e) Eating the same food as that served to the children (unless the staff member has dietary restrictions);
- f) Hearing and seeing at a distance required for playground supervision or driving;
- g) Being absent from work for illness no more often than the typical adult, to provide continuity of caregiving relationships for children in child care.

NAEYC's *Healthy Young Children: A Manual for Programs* provides models for an assessment by a health professional. See also *Model Child Care Health Policies*, available from National Association for the Education of Young Children (NAEYC) and from the American Academy of Pediatrics (AAP). Contact information located in Appendix BB.

Concern about the cost of health exams (particularly when many caregivers do not receive health benefits and earn minimum wage) is a barrier to meeting this standard. When staff members need hepatitis B immunization to meet OSHA requirements, the cost of this immunization may or may not be covered under a managed care contract. If not, the cost of health supervision (such as immunizations, dental and health exams) must be covered as part of the employee's preparation for work in the child care setting by the prospective employee or the employer. Child care workers are among those for whom annual influenza vaccination should be strongly considered.

Facilities should consult with ADA experts through the U.S. Department of Education funded Disability and Business Technical Assistance Centers throughout the country. These centers can be reached by calling 1-800-949-4232 and callers are routed to the appropriate region.

Also see STANDARD 1.045, STANDARD 6.014 and STANDARD 6.015. For a sample child care staff health assessment form, see Appendix E.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

OCCUPATIONAL HAZARDS

GENERAL

STANDARD 1.048 OCCUPATIONAL HAZARDS

The center's written personnel policies shall address the major occupational health hazards for workers in child care settings. Special health concerns of pregnant providers shall be carefully evaluated, and up-to-date information regarding occupational hazards for pregnant providers shall be made available to them and other workers. The occupational hazards including those regarding pregnant workers listed in Appendix B (*Major Occupational Health Hazards*) shall be referenced and used in evaluations by providers and supervisors.

RATIONALE: Employees must be aware of the risks to which they are exposed so they can weigh those risks and take countermeasures. As a workforce composed primarily of women of childbearing age, pregnancy is common among providers in child care settings. In a study of child care personnel, one quarter of the study's sample reported becoming pregnant since beginning work in child care, with higher pregnancy rates for directors (33%) and family home providers (36%) than for center staff (15%) (121, 122).

TYPE OF FACILITY: *Center; Large Family Child Care Home*

EXPOSURE TO BODY FLUIDS

STANDARD 1.033 TRAINING ON OCCUPATIONAL RISK RELATED TO HANDLING BODY FLUIDS

The director of a center or a large family child care home caregiver shall ensure that all staff members who are at risk of occupational exposure to blood or other blood-containing body

fluids will be offered hepatitis B immunizations and will receive annual training in Standard Precautions. Training shall be consistent with applicable standards of the Occupational Safety and Health Administration (OSHA Standard 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens") and local occupational health requirements and shall include, but not be limited to:

- a) Modes of transmission of bloodborne pathogens;
- b) Standard Precautions;
- c) Hepatitis B vaccine, pre-exposure, or post-exposure within 24 hours;
- d) Program policies and procedures regarding exposure to blood/body fluid;
- e) Reporting procedures under the exposure control plan to ensure that all first-aid incidents involving exposure are reported to the employer before the end of the work shift during which the incident occurs.

RATIONALE: Providing first aid in situations where blood is present is an intrinsic part of a caregiver's job. Split lips, scraped knees and other minor injuries associated with bleeding are common in child care. Regarding the applicability of the OSHA standard to child care, Patricia K. Clark, Director of the Directorate of Compliance Assistance stated:

"One of the central provisions of the OSHA standard on bloodborne pathogens is that employers are responsible for determining which job classifications or specific tasks and procedures are reasonably anticipated to result in worker contact with blood or other potentially infectious materials (OPIM). The standard relates coverage to occupational exposure, regardless of where that exposure may occur, since the risk of infection with bloodborne pathogens is dependent on the likelihood of exposure to blood or OPIM regardless of the particular job title or place of employment. If it is determined that a child care worker has occupational exposure, as defined by the standard, then that employee is covered by all sections of the standard including training, vaccination, personal protective equipment, and so forth."

Child care workers who are designated as responsible for rendering first aid or medical assistance as part of

their job duties are covered by the scope of this standard.

COMMENTS: OSHA has model exposure control plan materials for use by child care facilities. Using the model exposure control plan materials, child care providers can prepare a plan to comply with the OSHA requirements. The model plan materials are available from regional offices of OSHA. Contact information for OSHA is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home*

STANDARD 3.026 PREVENTION OF EXPOSURE TO BLOOD AND BODILY FLUIDS

Child care facilities shall adopt a modified version of Standard Precautions developed for use in hospitals by The Centers for Disease Control and Prevention as defined in this standard and as may be recommended by the Centers for Disease Control and Prevention for child care settings in the future. This modified version of Standard Precautions shall be used to handle potential exposure to blood, including the blood-containing body fluids and tissue discharges, and to handle other potentially infectious fluids.

In child care settings, exceptions to Standard Precautions as defined by the Centers for Disease Control and Prevention for hospital settings shall include:

- a) Use of non-porous gloves is optional unless blood or blood containing body fluids may be involved. Gloves are not required for feeding human milk or cleaning up of spills of human milk.
- b) Gowns and masks are not required.
- c) Sufficient barriers include materials such as disposable diaper table paper that is moisture resistant, and non-porous gloves.

The staff shall be educated regarding routine precautions to prevent transmission of bloodborne pathogens before beginning to work in the facility and at least annually thereafter. The staff training shall comply with requirements of the

Occupational Safety and Health Administration (OSHA), where applicable.

Procedures for Standard Precautions shall include:

- a) Surfaces that may come in contact with potentially infectious body fluids must be disposable or of a material that can be sanitized. Use of materials that can be sterilized is not required.
- b) The staff shall use barriers and techniques that:
 - 1) Minimize potential contact of mucous membranes or openings in skin to blood or other potentially infectious body fluids and tissue discharges and
 - 2) Reduce the spread of infectious material within the child care facility.

Such techniques include avoiding touching surfaces with potentially contaminated materials unless those surfaces are sanitized before further contact occurs with them by other objects or individuals.
- c) When spills of body fluids, urine, feces, blood, saliva, nasal discharge, eye discharge, injury or tissue discharges, and human milk occur, these spills shall be cleaned up immediately, and further managed as follows:
 - 1) For spills of vomit, urine, human milk, and feces, all floors, walls, bathrooms, tabletops, toys, kitchen counter tops, and diaper-changing tables in contact shall be cleaned and sanitized as for the procedure for diaper changing tables in STANDARD 3.014, Step 7.;
 - 2) For spills of blood or other potentially infectious body fluids, including injury and tissue discharges, the area shall be cleaned and sanitized. Care shall be taken to avoid splashing any contaminated materials onto any mucus membrane (eyes, nose, mouth);
 - 3) Blood-contaminated material and diapers shall be disposed of in a plastic bag with a secure tie.
 - 4) Floors, rugs and carpeting that have been contaminated by body fluids shall be cleaned by blotting to remove the fluid as quickly as possible, then sanitized by spot-cleaning with a detergent-disinfectant, and shampooing, or steam-cleaning the contaminated surface.

RATIONALE: Some children and adults may unknowingly be infected with HIV or other infectious agents, such as hepatitis B virus, as these agents may

be present in blood or body fluids (26, 28). Thus, the staff in all facilities should adopt Standard Precautions for all blood spills. Bacteria and viruses carried in the blood, such as hepatitis B, pose a small but specific risk in the child care setting (25). Blood and body fluids containing blood (such as watery discharges from injuries) pose the highest potential risk, because bloody body fluids contain the highest concentration of viruses. In addition, hepatitis B virus can survive in dried state in the environment for at least a week and perhaps even longer. Some other body fluids such as saliva contaminated with blood or blood-associated fluids may contain live virus (such as hepatitis B virus) but at lower concentrations than are found in blood itself. Other body fluids, including urine and feces, do not pose a risk with these bloodborne diseases unless they are visibly contaminated with blood, although these fluids do pose a risk with other infectious diseases.

Gloves are used mainly when people knowingly contact or suspect they may contact blood or blood-containing body fluids, including blood-containing tissue or injury discharges. These fluids may contain the viruses that transmit HIV, hepatitis B, and hepatitis C. While human milk (breast milk) can be contaminated with blood from a cracked nipple, the risk of transmission of infection to caregivers who are feeding expressed human milk is very low. Wearing of gloves to feed or clean up spills of expressed human milk is unnecessary, but caregivers with open cuts on their hands should avoid getting expressed human milk on their hands, especially if they have any open skin or sores on their hands.

During the preparation of the 2nd edition of *Caring for Our Children*, the Steering Committee consulted several experts on the issue of precautions required for handling of human milk. Published policies confirm a clear consensus that gloves are not required for feeding human milk. Although the issue of use of gloves for clean up of human milk spills has not been addressed in previously published policies or in peer-reviewed literature, the Steering Committee could find no persuasive evidence that the risk involved in cleaning up spills is sufficient to require the use of gloves for human milk spills in child care settings.

Touching a contaminated object or surface may spread illnesses. Many types of infectious germs may be contained in human waste (urine, feces) and body fluids (saliva, nasal discharge, tissue and injury discharges, eye discharges, blood). Because many infected people carry communicable diseases without having symptoms, and many are contagious before they experience a symptom, staff members need to protect themselves and the children they serve by carrying out sanitation procedures on a routine basis. Education of the staff regarding cleaning procedures can reduce the occurrence of illness in the group of children with whom they work (26, 28).

Prior to using a bleach solution to sanitize, clean any visible soil from the surface with a detergent and rinse well with water. By itself, bleach is not a good cleaning agent. Two minutes of contact with a solution of ¼ cup household liquid chlorine bleach in one gallon of tap water prepared fresh daily is an effective method of surface-sanitizing of environmental surfaces and other inanimate objects that have first been thoroughly cleaned of organic soil (26, 27, 29). Domestic bleach is sold in the conventional strength of 5.25% hypochlorite and a more recently marketed “ultra” bleach product that contains 6% hypochlorite solution. The recommended 1:64 dilution of ¼ cup of domestic bleach to 1 gallon of water (or 1 tablespoon to 1 quart of water) produces a solution that contains 500-800 parts per million of available chlorine. Unpublished tests by Chlorox shows 2 minutes of contact on a visibly clean surface that has been coated with a spray of a 1:64 dilution of household bleach, kills most disease-causing organisms on that surface. Air-drying is fine, since chlorine evaporates when the solution dries. If the surface is to be wiped dry, wait for the 2 minute contact time to elapse first. Industrially prepared detergent-sanitizer solutions or detergent cleaning, rinsing and application of a non-bleach sanitizer is acceptable as long as these products are non-toxic for children and are used according to the manufacturer's instructions.

Cleaning and sanitizing rugs and carpeting that have been contaminated by body fluids is challenging. Extracting as much of the contaminating material as possible before it penetrates the surface to lower layers helps to minimize this challenge. Cleaning and

sanitizing the surface without damaging it requires use of special cleaning agents designed for use on rugs, or steam cleaning.

Requirements of the OSHA for a facility plan and annual training of staff members who may be exposed to blood as a condition of their employment apply to child care workers who are employees.

COMMENTS: The Region III office of OSHA developed a model plan for child care facilities. Filling in the blanks in this model plan is easier than starting from scratch to write a conforming plan. The sanctions for failing to comply with OSHA requirements can be costly, both in fines and in health consequences. Child care providers should take the necessary steps to meet OSHA requirements. Regional offices of OSHA are listed with other federal agencies in the telephone directory.

Either single-use disposable gloves or utility gloves should be used. Single-use disposable gloves should be used only once and then discarded immediately without being handled. If utility gloves are used, they should be cleaned after every use with soap and water and then dipped in bleach solution up to the wrist. The gloves should then be taken off and hung to dry. The utility gloves should be worn, not handled, during this cleaning and sanitizing procedure.

Staff who wear gloves must be mindful that the wearing of gloves does not prevent contamination of their hands or of surfaces touched with contaminated gloved hands. Handwashing and sanitizing of contaminated surfaces is still required even when gloves are used.

For the proper technique for removing gloves, see Appendix D.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 3.024 PROCEDURE FOR NASAL SECRETIONS

Staff members and children shall blow or wipe their noses with disposable, one-use tissues and then discard them in a plastic-lined, covered, hands-free trash container. After blowing the nose, they shall wash their hands, as specified in STANDARD 3.021 and STANDARD 3.022.

RATIONALE: Handwashing is the most important way to reduce the spread of infection. Many studies have shown that unwashed or improperly washed hands are the primary carriers of infections.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 3.025 CUTS AND SCRAPES

Cuts or sores that are leaking body fluids shall be covered with a dry dressing to avoid contamination of surfaces in child care. The caregiver shall wear gloves if there is to be any contact with a wound.

If an individual has a cut or sore that is leaking a body fluid that cannot be contained or cannot be covered with a dry dressing, that person shall be excluded from the facility until the cut or sore is scabbed over or healed.

RATIONALE: Touching a contaminated object or surface may spread infectious organisms. Body fluids may contain infectious organisms.

Gloves can provide a protective barrier against infectious diseases that may be carried in body fluids.

COMMENTS: Covering sores on lips and on eyes is difficult. Dry scabs are best left open to the air. See STANDARD 3.069, for information regarding staff herpes simplex (cold sores).

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

EXPOSURE TO TOXIC SUBSTANCES

STANDARD 5.073 TYPE AND USE OF PESTICIDES AND HERBICIDES

If pesticides are used, natural pesticides that are non-toxic to humans shall be given first consideration.

If chemical pesticides are used, they shall be only those that are registered with the Environmental Protection Agency (EPA), of a type applied by a licensed exterminator, in a manner approved by the EPA. The facility shall have and consult a Material Safety Data Sheet (MSDS) for all toxic chemicals used, and shall be in compliance with the directions provided. General right-of-way pesticides or herbicides, sprayed in the community by others, shall be prohibited on the grounds of a child care facility.

Pesticides shall be stored in their original containers and in a locked room or cabinet accessible only to authorized staff. No restricted-use pesticides shall be stored or used on the premises except by properly licensed persons. Banned pesticides shall not be used.

Pesticides shall be applied in a manner that prevents skin contact and other exposure to children or staff members and minimizes odors in occupied areas.

Notification shall be given to parents and staff before using pesticides, to determine if any child or staff member is sensitive to the product. A member of the child care staff shall directly observe the application to be sure that toxic chemicals applied on surfaces do not constitute a hazard to the children or staff. Pesticides shall be used in strict compliance with the instructions on the label or as otherwise directed or approved by the regulatory authority. No pesticide shall be applied while children are present.

Following the use of pesticides, herbicides, fungicides, or other potentially toxic chemicals, the treated area shall be ventilated for the period re-commended on the product label or by a nationally certified regional poison control center

before being reoccupied. Tests, recommended by a nationally certified regional poison control center, shall be taken to determine safe levels before reentering the facility.

RATIONALE: Children must be protected from exposure to poisons. To prevent contamination and poisoning, child care staff must be sure that these chemicals are applied by individuals who are certified to do so. Direct observation of pesticide application by child care staff is essential to guide the exterminator away from surfaces that children can touch or mouth and to monitor for drifting of pesticides into these areas. The time of toxic risk exposure is a function of skin contact, the efficiency of the ventilating system, and the volatility of the toxic substance. The long-term effects of toxic substances are unknown. Spraying the grounds of a child care facility exposes children to toxic chemicals.

COMMENTS: Manufacturers of pesticides usually provide product warnings that exposure to these chemicals can be poisonous. Material safety data sheets should be available from a licensed exterminator or the product manufacturer.

Child care staff should ask to see the license of the exterminator and should be certain that the individual who applies the toxic chemicals has personally been trained and preferably, individually licensed. In some states only the owner of an extermination company is required to have this training, and he/she may then employ unskilled workers. Child care staff should ensure that the exterminator is familiar with the pesticide he/she is applying.

Child care operators should contact their state pesticide office and request that their child care facility be added to the state pesticide sensitivity list. When a child care facility is placed on the state pesticide sensitivity list, the child care operator will be notified if there are plans for general pesticide application occurring near the child care facility.

Child care staff and children who have developed sensitivity to pesticides can ask their physician to place them on a state pesticide sensitivity list. The state pesticide sensitivity list is made available to exterminators so that they are aware of people

working or being cared for in a geographical area who have sensitivity to pesticides.

For further information about pest control, contact the local health authority or the EPA. Contact information is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 5.102 INFORMING STAFF REGARDING PRESENCE OF TOXIC SUBSTANCES

Employers shall provide child care workers with hazard information, as required by the Occupational Safety and Health Administration (OSHA), about the presence of toxic substances such as asbestos, formaldehyde, or hazardous chemicals in use in the facility. This information shall include identification of the ingredients of art materials and sanitizing products. Where nontoxic substitutes are available, these nontoxic substitutes shall be used instead of toxic chemicals.

RATIONALE: These precautions are essential to the health and well-being of the staff and the children alike. Federal agencies have stated that the quality of indoor air is more of a problem than that of outdoor air. Indoor air pollution is thus a potential occupational health hazard for child care workers, particularly because of potential for exposure to infectious and chemical agents at the same time. In addition, many cleaning products and art materials contain ingredients that may be toxic. Regulations require employers to make the complete identity of these materials known to users. Because nontoxic substitutes are available for virtually all necessary products, exchanging them for toxic products is required.

COMMENTS: Employers may contact the local building safety inspection authority for information about toxic substances in the building. The U.S. Department of Labor, which oversees OSHA, is responsible for protection of workers and is listed in the phone book of all large cities. Because standards

change frequently, the facility should seek the latest standards from the Environmental Protection Agency (EPA). Information on toxic substances in the environment is available from the EPA. Material Safety Data Sheets (MSDS) are a good source of information. For information on consumer products and art materials, contact the U.S. Consumer Product Safety Commission (CPSC). Contact information is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home*

STANDARD 5.103 RADON CONCENTRATIONS

Radon concentrations inside a home or building used for child care shall be less than 4 picocuries per liter of air.

RATIONALE: Radon is a colorless, odorless, radioactive gas that occurs naturally. It can be found in soil, water, building materials, and natural gas. Radon from the soil is the main cause of radon problems. When radon gas is inhaled, it can damage lung tissue and lead to lung cancer. Radon levels can be easily measured to determine if acceptable levels have been exceeded. Various methods are available to reduce radon in a building.

COMMENTS: For material and information on radon, contact the Environmental Protection Agency (EPA). Contact information for the EPA is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 5.104 PREVENTING EXPOSURE TO ASBESTOS OR OTHER FRIABLE MATERIALS

Any asbestos, fiberglass, or other friable material or any material that is in a dangerous condition found within a facility or on the grounds of the facility shall be removed. Asbestos removal shall

be done by a contractor certified to remove, encapsulate, or enclose asbestos in accordance with existing regulations of the Environmental Protection Agency (EPA). No children shall be present until the removal and cleanup of the hazardous condition have been completed.

Pipe and boiler insulation shall be sampled and examined in an accredited laboratory for the presence of asbestos in a friable or potentially dangerous condition.

Nonfriable asbestos shall be identified to prevent disturbance and/or exposure during remodeling or future activities.

RATIONALE: Removal of significant hazards will protect the staff, children, and families who use the facility. Asbestos dust and fibers that are inhaled and reach the lungs can cause lung disease. The requirement for asbestos is based on the National Asbestos School Hazard Abatement Act of 1984 and U.S. Consumer Product Safety Commission (CPSC) guidelines.

COMMENTS: Asbestos that is in a friable condition means that it is easily crumbled. For more information regarding asbestos and applicable EPA regulations, contact regional offices of the EPA. Contact information is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 5.105 PROPER USE OF ARTS AND CRAFTS MATERIALS

Only arts and crafts materials that are labeled nontoxic in accordance with the Labeling of Hazardous Art Material Act (LHAMA), 15 U.S.C. 1277 and the American Society for Testing and Materials (ASTM) D4236-94 *Standard Practice for Labeling Art Materials for Chronic Health Hazards* shall be used in the child care facility. The facility shall prohibit use of old or donated materials with potentially harmful ingredients.

Caregivers shall closely supervise all children using art materials and shall make sure art materials are

properly cleaned up and stored in original containers that are fully labeled. Caregivers shall have emergency protocols in place in the event of an injury, poisoning, or allergic reaction. When using these materials, children and staff shall not be eating or drinking.

RATIONALE: This standard prevents contamination and injury. Labels are required on art supplies to identify any hazardous ingredients, risks associated with their use, precautions, first aid, and sources of further information (40).

COMMENTS. For information on safe art materials contact the Art and Creative Materials Institute, the ASTM, and the U.S. Consumer Product Safety Commission. Contact information is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 5.106 PROHIBITION OF POISONOUS SUBSTANCES AND PLANTS

Poisonous or potentially harmful substances and plants shall be prohibited in any part of a child care facility that is accessible to children. All substances not known to be nontoxic shall be identified and checked by name with the local poison control center to determine safe use.

RATIONALE: Plants are among the most common household substances that children ingest. Contact dermatitis is also a concern. Determining the toxicity of every commercially available household plant is difficult. A more reasonable approach is to keep any unknown plant and other potentially poisonous substances out of the environment that children use. All outside plants and their leaves, fruit, and stems should also be considered potentially toxic (41). Many plants are essentially nontoxic when ingested in small to modest quantities. These nontoxic plants are preferable for use in child care facilities.

COMMENTS: Plants can be placed behind a glass enclosure to keep children from touching the plant.

Cuttings, trimmings, and leaves from potentially harmful plants must be disposed of safely so children do not have access to them.

For nontoxic, frequently ingested products and plants, see the American Academy of Pediatrics' (AAP) *Handbook of Common Poisonings in Children*. Contact information for the AAP is located in Appendix BB. See Appendix U, for a list of poisonous and safe plants.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 5.107 PROHIBITION OF SPECIFIC CHEMICALS

The use of the following shall be prohibited:

- a) Incense;
- b) Moth crystals or moth balls;
- c) Chemical air fresheners that:
 - 1) Contain ingredients on the Environmental Protection Agency's (EPA) toxic chemicals lists;
 - 2) Are not approved as safe by the regulatory health authority.

RATIONALE: Many chemicals are sold to cover up noxious odors or ward off pests. Many of these chemicals are hazardous. As an alternative, child care providers should dilute noxious odors through cleaning and ventilation, and control pests using nontoxic methods.

COMMENTS: Contact the EPA Regional offices listed in the federal agency section of the telephone directory for assistance, or contact any nationally certified regional poison control center. Contact information for the EPA is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 5.108 VENTILATION OF RECENTLY CARPETED OR paneled AREAS

Doors and windows shall be opened for 48-72 hours in areas that have been recently carpeted or paneled using adhesives. Window fans, room air conditioners, or other means to exhaust emission to the outdoors shall be used.

RATIONALE: Adhesives that contain toxic materials can cause significant symptoms in occupants of buildings where these materials are used.

COMMENTS: Airing the room for 48-72 hours is a minimum recommended period of time. Depending on the degree of air circulation and the rate of introducing fresh air into the room, additional ventilation time may be required. For more information on "safe" levels of home indoor air pollutants, contact the Environmental Protection Agency (EPA) or the U.S. Consumer Product Safety Commission (CPSC). Contact information is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 5.109 PROHIBITION OF MATERIALS EMITTING TOXIC SUBSTANCES

Insulation or other materials that contain elements that may emit toxic substances over recommended levels in the child care environment shall not be used in facilities. If existing structures contain such materials, the facility shall be monitored regularly to ensure a safe environment as specified by the regulatory agency.

RATIONALE: Children and caregivers must not be exposed to toxic substances. Some insulation and building materials such as urea foam insulation and particle board can emit formaldehyde gas, a respiratory and eye irritant (42).

COMMENTS: Regional offices of the Environmental Protection Agency (EPA) can be contacted for advice. Contact information is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 5.110 TESTING FOR LEAD

Any surface and the grounds around and under surfaces that children use at a child care facility, including dirt and grassy areas shall be tested for excessive lead in a location designated by the health department. Painted play equipment and imported vinyl mini-blinds shall be evaluated for the presence of lead. If they are found to have toxic levels, corrective action shall be taken to prevent exposure to lead at this facility. Only nontoxic paints shall be used.

In all centers, both exterior and interior surfaces covered by paint with lead levels of 0.06% and above, and accessible to children, shall be removed by a safe chemical or physical means or made inaccessible to children, regardless of the condition of the surface.

In large and small family child care homes, flaking or deteriorating lead-based paint on interior or exterior surfaces, equipment, or toys accessible to preschool-age children shall be removed or abated according to health department regulations. Where lead paint is removed, the surface shall be refinished with lead-free paint or nontoxic material. Sanding, scraping, or burning of high-lead surfaces shall be prohibited. Children and pregnant women shall not be present during abatement activities.

RATIONALE: Ingestion of lead paint can result in high levels of lead in the blood, which affects the central nervous system and can cause mental retardation (42). Paint and other surface coating materials should comply with lead content provisions of the *Code of Federal Regulations, Title 16, Part 1303*.

Some imported vinyl mini-blinds contain lead and can deteriorate from exposure to sunlight and heat and form lead dust on the surface of the blinds (43). The

U.S. Consumer Product Safety Commission (CPSC) recommends that consumers with children 6 years of age and younger remove old vinyl mini-blinds and replace them with new mini-blinds made without added lead or with alternative window coverings. For more information on mini-blinds, contact the CPSC. Contact information is located in Appendix BB.

Lead is a neurotoxicant. Even at low levels of exposure, lead can cause reduction in a child's IQ and attention span, and result in reading and learning disabilities, hyperactivity, and behavioral difficulties. Lead poisoning has no "cure." These effects cannot be reversed once the damage is done, affecting a child's ability to learn, succeed in school, and function later in life. Other symptoms of low levels of lead in a child's body are subtle behavioral changes, irritability, low appetite, weight loss, sleep disturbances, shortened attention span.

COMMENTS: Paints made before 1978 may contain lead. If there is any doubt about the presence of lead in existing paint, contact the health department for information regarding testing. Lead is used to make paint last longer. The amount of lead in paint was reduced in 1950 and further reduced again in 1978. Houses built before 1950 likely contain lead paint, and houses built after 1950 have less lead in the paint. House paint sold today has little or no lead. Lead is prohibited in contemporary paints. Lead-based paint is the most common source of lead poisoning in children.

In buildings where lead has been removed from the surfaces, lead paint may have contaminated surrounding soil. Therefore, the soil in play areas around these buildings should be tested. Outdoor play equipment was commonly painted with lead-based paints, too. These structures and the soil around them should be checked if they are not known to be lead-free.

The danger from lead paint depends on:

- a) Amount of lead in the painted surface;
- b) Condition of the paint;
- c) Amount of paint that gets into the child.

Children 9 months through 5 years of age are at the greatest risk for lead poisoning. Most children with lead poisoning do not look or act sick. A blood lead

test is the only way to know if children are being lead poisoned. Children should have a test result below 10 ug/dL.

A booklet called *Protect Your Family from Lead in Your Home* is available from the Environmental Protection Agency (EPA), the U.S. CPSC, and U.S. Department of Housing and Urban Development (HUD). The EPA also has a pamphlet, called *Finding a Qualified Lead Professional for Your Home*, that provides information on how to identify qualified lead inspectors and risk assessors. For further information on lead poisoning, contact the EPA or the National Lead Information Center. Contact information is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

INFECTIOUS DISEASES

HAEMOPHILUS INFLUENZAE TYPE B (Hib)

STANDARD 6.001 IMMUNIZATION FOR HAEMOPHILUS INFLUENZAE TYPE B

All children in child care shall have received age-appropriate immunizations with an *H. influenzae* type b (Hib) conjugate vaccine (44).

Children in child care, who are not immunized or not age-appropriately immunized, shall be excluded from care immediately if the child care facility has been notified of a documented case of an invasive Hib infection. These children shall be allowed to return when the risk of infection is no longer present, as determined by the health department.

RATIONALE: Appropriate immunization of children with an *H. influenzae* type b conjugate vaccine prevents the occurrence of disease and decreases the rate of carriage of this organism, thereby decreasing the risk of transmission to others (45, 46).

COMMENTS: Transmission of *H. influenzae* type b may occur among unimmunized young children in group child care, especially children younger than 24 months of age.

For additional regarding Hib disease, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.002 INFORMING PARENTS OF HIB EXPOSURE

If a child with invasive *H. influenzae* type b (Hib) infection has been in care, the facility shall inform parents of other children who attend the facility, after consultation with the health department, that their children may have been exposed to the Hib bacteria and may have greater risk of developing serious Hib disease if their child is unimmunized or incompletely immunized. The facility shall recommend that parents contact their child's health care provider.

RATIONALE: The risk of secondary cases of Hib disease occurring among child care contacts does not seem to be uniform. Studies of child care contacts of children with Hib disease have varied in identification of an increased risk of Hib disease in this setting (47, 48, 49, 50).

In general, the risk of secondary Hib disease is probably lower for child care contacts than it is for household contacts. The risk of secondary cases of Hib disease occurring among child care attendees is greatest among, and may be limited to, children younger than 2 years of age who are not immunized (49). In settings with more than one classroom, increased risk has been shown only for children in the classroom of the infected child (49, 50).

COMMENTS: Sample letters of notification to parents that their child may have been exposed to an infectious disease are contained in the (National Academy for the Education of Young Children (NAEYC) publication, *Healthy Young Children*. Contact information is located in Appendix BB.

For information about health education for children, staff, and parents, see STANDARD 2.060 through STANDARD 2.067.

For additional information regarding Hib disease, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.003 INFORMING PUBLIC HEALTH AUTHORITIES OF HIB CASES

Local and/or state public health authorities shall be notified immediately about cases of *H. influenzae* type b (Hib) infections involving children or child care providers in the child care setting. Facilities shall cooperate with their health department in notifying parents of children who attend the facility about exposure to children with Hib disease. This may include providing local health officials with the names and telephone numbers of parents of children in classrooms or facilities involved.

The health department may recommend rifampin, an antibiotic taken to prevent infection, for children in care and staff members, to prevent secondary spread of Hib disease in the facility. Antibiotic prophylaxis is not recommended for pregnant women because the effect of rifampin on the fetus has not been established.

RATIONALE: Because the risk of secondary cases of Hib disease seems to be variable among child care contacts of children with Hib disease, opinions differ as to the most appropriate guidelines for the use of rifampin to prevent infection in the child care setting. Rifampin treatment of children exposed to a child with Hib disease can reduce the prevalence of Hib respiratory tract colonization in treated children and reduce the subsequent risk of invasive Hib infection, particularly in children under 2 years of age (49). Prophylaxis should be initiated as soon as possible, when 2 or more cases of invasive disease have occurred within 60 days and when unimmunized or incompletely immunized children attend the child care facility.

In addition, children who are not immunized or are not age-appropriately immunized should receive a dose of vaccine and should be scheduled for completion of the *Recommended Childhood Immunization Schedule* from the American Academy of Pediatrics (AAP) (44, 51). See Appendix G.

COMMENTS: For additional information regarding Hib disease, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STREPTOCOCCUS PNEUMONIAE

STANDARD 6.004 IMMUNIZATION WITH S. PNEUMONIAE CONJUGATE VACCINE

All children less than 23 months of age in child care shall have received age-appropriate immunizations with *S. pneumoniae* conjugate vaccine. Children age 24 to 59 months of age at high risk of invasive disease caused by *S. pneumoniae* (including sickle cell disease, asplenia, HIV, chronic illness or immunocompromised) shall be recommended to receive *S. pneumoniae* conjugate vaccine. All other children 24-59 months of age shall be encouraged to be protected against invasive *S. pneumoniae* disease through immunization, especially children who attend out-of-home child care and children of American Indian, Alaska Native, and African-American descent (52, 53, 54).

RATIONALE: Pneumococcal disease among children in out-of-home child care has been reported more frequently over the last decade in the U.S. and other developed countries. In the U.S., the risk for contracting an invasive pneumococcal infection in out-of-home child care (as defined as child care greater than 4 hours/week outside the home) increases by 2 to 3 times in children less than 60 months of age. Appropriate immunization of children with *S. pneumoniae* conjugate vaccine prevents the occurrence of disease and decreases transmission to others.

The risk for invasive disease is greatest in children who attend out-of-home child care and children of American Indian, Alaska Native, and African-American descent (53, 54).

COMMENTS: For additional information regarding *S. pneumoniae* disease, consult the *Red Book* from the American Academy of Pediatrics (AAP). See also Appendix G. Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.005 INFORMING PUBLIC HEALTH AUTHORITIES OF INVASIVE S. PNEUMONIAE

Local and/or state public health authorities shall be notified immediately about cases of invasive *S. pneumoniae* infections involving children or child care providers in the child care setting. Facilities shall cooperate with their health department in notifying parents of children who attend the facility about exposure to children with invasive *S. pneumoniae* disease. This may include providing local health officials with the names and telephone numbers of parents of children in classrooms or facilities involved.

RATIONALE: Secondary spread of *S. pneumoniae* in child care has been reported, but the degree of risk of secondary spread in child care facilities is unknown (55). Prophylaxis of contacts after the occurrence of a single case of invasive *S. pneumoniae* disease is not recommended.

In addition, children who are not immunized or are not age-appropriately immunized should receive a dose of vaccine and should be scheduled for completion of the *Recommended Childhood Immunization Schedule* from the American Academy of Pediatrics (AAP) (52). See Appendix G.

COMMENTS: For additional information regarding *S. pneumoniae* disease, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

NEISSERIA MENINGITIDIS (MENINGOCOCCUS)

STANDARD 6.006 INFORMING PUBLIC HEALTH AUTHORITIES OF MENINGOCOCCAL INFECTIONS

Local and/or state public health authorities shall be notified immediately about cases of meningococcal infections involving children or child care providers in the child care setting. Facilities shall cooperate with their local health department officials in notifying parents of children who attend the facility about exposures to children with meningococcal infections. This may include providing local health officials with the names and telephone numbers of parents of children in involved classrooms or facilities.

RATIONALE: *Neisseria meningitidis* is an important cause of bacterial meningitis in childhood. The infection is spread from person to person by direct contact with respiratory tract secretions (including large droplets) that contain *N. meningitidis* organisms.

COMMENTS: Sample letters of notification to parents that their child may have been exposed to an infectious disease are contained in the National Academy for the Education of Young Children (NAEYC) publication, *Healthy Young Children*. Contact information is located in Appendix BB.

For information about health education for children, staff, and parents, see STANDARD 2.060 through STANDARD 2.067.

For additional information regarding meningococcal disease, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.007 HEALTH DEPARTMENT RECOMMENDATIONS ON ANTIBIOTICS

When the health department recommends administering an antibiotic to prevent secondary infection of meningococcal disease within the facility, an antibiotic to prevent an infection shall be administered to staff members and children, with parental permission (56, 57, 58).

RATIONALE: Children and staff exposed, by close contact for an extended period to the child first infected with meningococcal disease, are at risk for contracting invasive meningococcal disease (56). The attack rate of meningococcal disease for this population is more than 300 times higher than rates in the general population (57).

Because outbreaks may occur in child care settings, chemoprophylaxis with rifampin or ceftriaxone is indicated for exposed child care contacts. Children in child care who are exposed to a child or an adult with meningococcal infection should receive rifampin or ceftriaxone as soon as possible to prevent an infection, preferably within 24 hours of diagnosis of the primary case (57, 58). In contacts over 18 years of age, ciprofloxacin is effective. Rifampin and ciprofloxacin are not recommended for pregnant women.

COMMENTS: For additional information regarding meningococcal disease, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.008 PROTECTIVE MEASURES FOR MENINGOCOCCAL INFECTION

When an antibiotic to prevent an infection with *Neisseria meningitidis* (meningococcal infection) is indicated for child care contacts, all children and staff members, for whom prophylaxis has been recommended, shall be excluded from attending the facility until these measures have begun. Any exposed individual who develops a febrile illness

(one accompanied by a fever) shall receive prompt medical evaluation.

New entry children shall not be enrolled in a child care facility in which a case of invasive *N. meningitidis* has been documented until 2 months has elapsed since the diagnosis was made.

RATIONALE: Children and staff exposed, by close contact for an extended period to the child first infected with meningococcal disease, are at risk for contracting invasive meningococcal disease (56). The attack rate of meningococcal disease for this population is more than 300 times higher than rates in the general population (57).

Because outbreaks may occur in child care settings, chemoprophylaxis with rifampin or ceftriaxone is indicated for exposed child care contacts. Children in child care who are exposed to a child or an adult with meningococcal infection should receive rifampin or ceftriaxone as soon as possible to prevent an infection, preferably within 24 hours of diagnosis of the primary case (57, 58). In contacts over 18 years of age, ciprofloxacin is effective. Rifampin and ciprofloxacin are not recommended for pregnant women.

COMMENTS: For additional information regarding meningococcal disease, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

PERTUSSIS

STANDARD 6.009 INFORMING PUBLIC HEALTH AUTHORITIES OF PERTUSSIS CASES

Local and/or state public health authorities shall be notified immediately about cases of pertussis involving children or child care providers in the child care setting. Facilities shall cooperate with their local health department officials in notifying parents of children who attend the facility about exposures to children with pertussis. This may include providing the health department officials

with the names and telephone numbers of parents of children in the classrooms or facilities involved.

Guidelines for use of antibiotics and immunization for prevention of pertussis in individuals who have been in contact with children who have pertussis shall be implemented in cooperation with officials of the health department. Children and staff who have been exposed to pertussis, especially those who are incompletely immunized, shall be observed for respiratory tract symptoms for 20 days after the last contact with the infected person.

RATIONALE: Notification of health department officials when pertussis occurs in a child or staff member in a child care center will help ensure the following (59, 60):

- a) All children have received age-appropriate immunization;
- b) Erythromycin prophylaxis (or other recommended antibiotic therapy, if erythromycin is not tolerated) is provided to those exposed to the child first infected with pertussis;
- c) Children and adults are observed for respiratory tract symptoms.

COMMENTS: Sample letters of notification to parents that their child may have been exposed to an infectious disease are contained in the National Academy for the Education of Young Children (NAEYC) publication, *Healthy Young Children*. Contact information for the NAEYC is located in Appendix BB.

For information about health education for children, staff, and parents, see STANDARD 2.060 through STANDARD 2.067.

For additional information regarding pertussis, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.010 PROPHYLACTIC TREATMENT FOR PERTUSSIS

When there is a known or suspected occurrence of pertussis in a child care facility, all staff members and children in care shall initiate the appropriate prophylactic treatment (usually administration of erythromycin or another appropriate antibiotic) and any additional treatment deemed medically necessary by a health care provider before they are allowed to return to the facility.

Adults and children who have been in contact with a person infected with pertussis shall be monitored closely for respiratory tract symptoms for 20 days after the last contact with the infected person.

RATIONALE: Even if outbreaks of pertussis in child care facilities have not been reported, children and staff who attend out-of-home child care occasionally contract pertussis. The spread of infection to contacts who are incompletely immunized can be reduced by treating the primary case and susceptible contacts with prophylactic antibiotics, usually erythromycin (59, 60).

COMMENTS: For additional information regarding pertussis, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.011 EXCLUSION FOR PERTUSSIS

Children and staff members with characteristic symptoms (primarily cough) of pertussis shall be excluded from child care pending evaluation by a health care provider. The child or staff member may not return to the facility until:

- a) Five days after initiation of a 10-14 day course of erythromycin or other recommended antibiotic therapy;
- b) Three to four weeks after the onset of the cough;
- c) The medical condition allows.

RATIONALE: Even if outbreaks of pertussis in child care facilities have not been reported, children and staff who attend out-of-home child care occasionally contract pertussis. The spread of infection to contacts who are incompletely immunized can be reduced by treating the primary case and susceptible contacts with prophylactic antibiotics, usually erythromycin (59, 60).

COMMENTS: For additional information regarding pertussis, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

GROUP A STREPTOCOCCAL (GAS) INFECTION

STANDARD 6.012 EXCLUSION FOR GROUP A STREPTOCOCCAL INFECTIONS

Children with group A streptococcal (GAS) respiratory tract, skin, or ear infections shall be excluded from child care until 24 hours after antibiotic treatment has been initiated and until the child has no fever for 24 hours.

RATIONALE: Streptococcal respiratory tract infections and scarlet fever resulting from GAS have been reported in children in child care, but are not a major problem (61, 62). Group A streptococcal respiratory tract infections may resolve without treatment; however, GAS respiratory tract infections can be complicated by pneumonia, arthritis, rheumatic fever, and glomerulonephritis (63).

Early identification and treatment of GAS infection in children and adults are important in reducing transmission and subsequent occurrence of disease. Consultation with the health department is advised when high rates of streptococcal infection occur in child care facilities. Parents of children exposed to a child with documented GAS infection should be notified of the exposure.

COMMENTS: For additional information regarding group A streptococcal respiratory tract infection, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.013 INFORMING CAREGIVERS OF GROUP A STREPTOCOCCAL INFECTION

Parents who become aware that their child is infected with group A streptococci (GAS), has strep throat, or has scarlet fever, shall inform caregivers within 24 hours.

When exposure to GAS infection occurs, caregivers, in cooperation with health department officials, shall inform the parents of other children who attend the facility, that their children may have been exposed.

RATIONALE: Periodically, the incidence of rheumatic fever seems to increase (63). Identification and treatment of streptococcal infections of the respiratory tract are central to preventing rheumatic fever. Therefore, awareness of the occurrence of streptococcal infection in child care is important. Adult child care staff members are not immune to streptococcal infections and may be carriers of organisms that cause disease in children. When outbreaks of streptococcal disease occur, interventions are available to limit transmission of streptococcal infection. Consultation with the health department is advised when high rates of streptococcal infection occur in child care facilities.

This information could be useful to the exposed child's health care provider if the exposed child develops illness.

COMMENTS: Sample letters of notification to parents that their child may have been exposed to an infectious disease are contained in the (National Academy for the Education of Young Children (NAEYC) publication, *Healthy Young Children*. Contact information is located in Appendix BB.

For information about health education for children, staff, and parents, see STANDARD 2.060 through STANDARD 2.067.

For additional information regarding group A streptococcal infections, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

TUBERCULOSIS

STANDARD 6.014 MEASURES FOR DETECTION AND CONTROL OF TUBERCULOSIS

Local and/or state public health authorities shall be notified immediately about suspected cases of tuberculosis disease involving children or child care providers in the child care setting. Facilities shall cooperate with their local health department officials in notifying parents of children who attend the facility about exposures to children or staff with tuberculosis disease. This may include providing the health department officials with the names and telephone numbers of parents of children in the classrooms or facilities involved.

Tuberculosis transmission shall be controlled by requiring regular and substitute staff members and volunteers to have their tuberculosis status assessed with a one-step or two-step Mantoux intradermal skin test prior to beginning employment unless they produce documentation of the following:

- a) A positive Mantoux intradermal skin test result in the past, or
- b) Tuberculosis disease that has been treated appropriately in the past.

The one-step Mantoux intradermal tuberculin test shall suffice except that for individuals over 60 years of age or those who have a medical condition that reduces their immune response, the use of the two-step method is required. Individuals with a positive Mantoux intradermal skin test or

tuberculosis disease in the past shall be evaluated with chest radiographs and shall be cleared for work by their physician or a health department official. Review of the health status of any staff member with a positive Mantoux intradermal skin test or tuberculosis disease in the past shall be part of the routine annual staff health appraisal (64).

In large and small family child care homes, this requirement applies to all adolescents and adults who are present while the children are in care.

Tuberculosis screening by Mantoux intradermal skin testing, using the one-step procedure, of staff members with previously negative skin tests shall not be repeated on a regular basis unless required by the local or state health department. Anyone who develops an illness consistent with tuberculosis shall be evaluated promptly by a physician. Staff members with previously positive skin tests shall be under the care of a physician who, annually, will document the risk of contagion related to the person's tuberculosis status by performing a symptom review including asking about chronic cough, unintentional weight, unexplained fever and other potential risk factors.

RATIONALE: Young children acquire tuberculosis infection from infected adults or occasionally, infected adolescents (64). Tuberculosis organisms are spread by inhalation of a small particle aerosol produced by coughing or sneezing by an adult or adolescent with contagious (active) pulmonary tuberculosis. Transmission usually occurs in an indoor environment. Tuberculosis is not spread through objects such as clothes, dishes, floors, and furniture.

The one-step Mantoux method of intradermal PPD skin testing involves injecting the material known as PPD into the skin so that a bleb is raised as the material is injected. For most healthy individuals, the one-step test is sufficient to detect latent TB or active TB disease. TB testing depends on cell-mediated immunity and the anamnestic or memory response where the body recalls a previous encounter with the antigen and reacts to it. In older individuals and those who have one of a group of specific conditions that reduce immune response, the first Mantoux test can produce a false negative response to a first test. In these individuals, the two-step method is recommended, involving repeating the Mantoux test procedure with an interval of at least one week to get an accurate result. Anamnestic memory for most antigens occurs within one week after stimulation

with the substance -thus a second test may be positive when a first is negative and indicate that an individual has latent TB or TB disease. The need for a two-step test for individuals under 60 years of age should be determined by the clinician performing the test or by the local department of health.

COMMENTS: The two stages of tuberculosis are:

- a) Latent tuberculosis infection, when the tuberculosis germ is in the body and causes a positive Mantoux intradermal skin test but does not cause sickness;
- b) Active tuberculosis (tuberculosis disease), when the tuberculosis germ is in the body and causes sickness.

Virtually all tuberculosis is transmitted from adults and adolescents with tuberculosis disease. Infants and young children with tuberculosis are not likely to transmit the infection to other children or adults because they generally do not produce sputum and are unable to forcefully cough out large numbers of organisms into the air.

Only Mantoux intradermal skin test, containing 5 tuberculin units of purified protein derivative administered intradermally, should be used for skin testing. Multiple puncture tests should no longer be used because several problems severely limit their use. Problems include a lack of antigen standardization, false-positive and false negative results, and variable sensitivity and specificity.

For additional information regarding tuberculosis, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.015 ATTENDANCE OF CHILDREN WITH TUBERCULOSIS INFECTION

Children with tuberculosis infection or disease can attend child care if they are receiving appropriate therapy.

RATIONALE: Children can return to regular activities as soon as effective therapy has been instituted, adherence to therapy has been documented, and clinical symptoms have disappeared. If approved by local health officials, children may attend out-of-home child care once they are considered non-infectious to others.

COMMENTS: For additional information regarding tuberculosis, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

PARVOVIRUS B19

STANDARD 6.016 ATTENDANCE OF CHILDREN WITH ERYTHEMA INFECTIOSUM (EI)

Children who develop erythema infectiosum (EI), also known as fifth disease, following infection with parvovirus B19, shall be allowed to attend child care because they are no longer contagious when signs and symptoms appear.

RATIONALE: EI is caused by parvovirus B19. EI begins with a fever, headache, and muscle aches, and is followed by a rash, which is intensely red with a “slapped cheek” appearance. A lace-like rash appears on the rest of the body. Isolation or exclusion of an immunocompetent person with parvovirus B19 infection in the child care setting is not necessary because little to no virus is present in the respiratory tract secretions at the time of occurrence of the rash (65).

COMMENTS: For additional information regarding parvovirus B19, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

UNSPECIFIED RESPIRATORY TRACT INFECTION

STANDARD 6.017 ATTENDANCE OF CHILDREN WITH UNSPECIFIED RESPIRATORY TRACT INFECTION

Children without fever who have mild symptoms associated with the common cold, sore throat, croup, bronchitis, rhinitis (runny nose), or otitis media (ear infection) shall not be denied admission to child care, sent home from child care, or separated from other children in the facility unless their illness is characterized by one or more of the following conditions:

- a) The illness has a specified cause that requires exclusion, as determined by other specific performance standards in Child Inclusion/Exclusion/Dismissal, STANDARD 3.065 through STANDARD 3.068;
- b) The illness limits the child's comfortable participation in child care activities;
- c) The illness results in a need for more care than the staff can provide without compromising the health and safety of other children.

Treatment with antibiotics shall not be required or otherwise encouraged as a condition for attendance of children with mild respiratory tract infections unless directed by local health authorities.

RATIONALE: The incidence of acute diseases of the respiratory tract, including the common cold, croup, bronchitis, pneumonia, and otitis media, is high in infants and young children, whether they are cared for at home or attend out-of-home facilities (66). Studies suggest that children who attend child care facilities have a significantly higher risk of upper and lower respiratory tract infections compared to children who are cared for at home and that infants and young children in child care have a higher incidence of these infections when they first begin to attend child care (67, 68, 69).

Children, 3 years of age and younger, experience an average of 5 to 10 respiratory tract infections each year, most of which are not severe and are caused by viruses that infect the respiratory tract (70). There is no evidence that the incidence of most acute diseases

of the respiratory tract can be reduced among children in child care by any specific intervention other than routine sanitation and personal hygiene.

Exclusion of ill children from the facility has not been found of value in preventing common respiratory infections.

When compliance with environmental infection control practices is high in child care settings, a reduction in episodes of colds is possible (71). Most children with viral respiratory tract infections remain infectious for at least 5 to 8 days. Frequently, infected children are shedding viruses before they are obviously ill, and some infected children never become overtly ill. Therefore, excluding children with respiratory tract disease from child care is not likely to limit transmission of respiratory tract infections in the child care setting.

The inappropriate use of antibiotics is a serious public health problem leading to development of antibiotic resistance (72, 73). Inappropriate antibiotic use in child care for mild respiratory tract infections is common even though these infections are often caused by viruses. Parents may attempt to pressure physicians into prescribing antibiotics for infections because they falsely believe that antibiotics will shorten the time when their children are excluded from child care.

COMMENTS: Uncontrolled coughing, difficult or rapid breathing, and wheezing (if associated with difficult breathing or if the child has no history of asthma) may represent severe illness or even a life-threatening condition. Exclusion in these cases is for the child's safety. The child should receive medical care before being allowed to return to the facility.

For additional information regarding unspecified respiratory tract infections, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

HERPES VIRUSES

Please note that if a staff member has no contact with the children, or with anything with which the children

come in contact, the staff requirements in these standards do not apply to that staff member.

HERPES SIMPLEX

STANDARD 6.018 DISEASE RECOGNITION AND CONTROL OF HERPES SIMPLEX VIRUS

Children with herpetic gingivostomatitis, an infection of the mouth caused by the herpes simplex virus, who do not have control of oral secretions shall be excluded from child care. In selected situations, children with mild disease who are in control of their mouth secretions may not have to be excluded. The facility's health consultant or health department officials shall be consulted.

Child care providers with herpetic gingivostomatitis, cold sores, or herpes labialis shall do the following:

- a) Refrain from kissing and nuzzling children;
- b) Refrain from sharing food and drinks with children and other caregivers;
- c) Avoid touching the lesions;
- d) Wash their hands frequently;
- e) Cover any skin lesion with a bandage, clothing, or an appropriate dressing.

Child care providers shall be instructed in the importance of and technique for handwashing and other measures aimed at limiting the transfer of infected material, such as saliva, tissue fluid, or fluid from a skin sore.

RATIONALE: Initial herpes simplex virus disease in children often produces a sudden illness of short duration characterized by fever and sores around and within the mouth. Illness and viral excretion may persist for a week or more; severe open skin sores may prevent oral intake and necessitate hospitalization (74). Recurrent oral herpes is manifested as small, fluid-filled blisters on the lips and entails a much shorter period of virus shedding from sores. Adults and children also can shed the virus in oral secretions in the absence of identifiable sores.

Although the risk of transmission of herpes simplex virus in the child care setting has not been documented, spread of infection within families has been reported and is thought to require direct contact with infected secretions (74). Transmission of herpes simplex in child care is uncommon (75).

COMMENTS: For additional information on policies, staff education, on recognizing and controlling herpes simplex and varicella-zoster (chickenpox) viruses, see Training STANDARD 1.023 through STANDARD 1.033; Hygiene STANDARD 3.012 through STANDARD 3.027, Child Inclusion/Exclusion/Dismissal, STANDARD 3.065 through STANDARD 3.068; and Notification of Parents, STANDARD 3.084 and STANDARD 3.085.

For additional information regarding herpes simplex, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

VARICELLA-ZOSTER (CHICKENPOX) VIRUS

STANDARD 6.019 STAFF AND PARENT NOTIFICATION ABOUT VARICELLA-ZOSTER (CHICKENPOX) VIRUS

The child care facility shall notify all staff members and parents when a case of chickenpox occurs, informing them of the greater likelihood of serious infection in susceptible adults, the potential for fetal damage if infection occurs during pregnancy, and the risk of severe varicella in children or adults whose immune systems are impaired for any reason including HIV infection, steroid use, cancer chemotherapy, or organ transplantation (76).

RATIONALE: About 5 to 10 percent of adults will be susceptible to varicella-zoster virus. Susceptible child care staff members who are pregnant and are exposed to children with chickenpox should be referred to physicians or other health professionals who are knowledgeable in the area of varicella

infection during pregnancy within 24 hours after the exposure is recognized. The Centers for Disease Control and Prevention (CDC) and the American Academy of Pediatrics (AAP) recommend the use of varicella vaccine in non-pregnant susceptible persons 12 months of age and older within 72 hours after exposure to varicella (76, 77).

COMMENTS: Sample letters of notification to parents that their child may have been exposed to an infectious disease are contained in the National Academy for the Education of Young Children (NAEYC) publication, *Healthy Young Children*. Contact information is located in Appendix BB.

For information about health education for children, staff, and parents, see STANDARD 2.060 through STANDARD 2.067.

For additional information regarding varicella, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.020 EXCLUSION OF CHILDREN WITH VARICELLA-ZOSTER (CHICKENPOX) VIRUS

Children who develop chickenpox shall be excluded until all sores have dried and crusted (usually 6 days).

Staff members or children with shingles (herpes zoster) shall keep sores covered by clothing or a dressing until sores have crusted. The need for excluding an infected person shall be decided based on the recommendations of the person's health care provider. If a conflict or question about return to the child care facility arises, the facility shall consult personnel at the health department. Until the conflict is resolved, readmission shall be delayed.

RATIONALE: Exclusion of children infected with varicella-zoster virus may not control illness in child care, but exclusion may help control disease caused

by this virus in some individuals (such as adults, children and adults who have a compromised immune system, and newborn infants).

The chickenpox virus seems to be present in respiratory tract secretions and to be shed from the mouth and throat as well as from skin lesions. Spread from oral or respiratory tract secretions to susceptible contacts is likely.

With shingles, the virus is present in small, fluid-filled blisters, and is spread by direct contact. Sores that are covered seem to pose little risk to susceptible persons. Older children and staff members with herpes zoster should be instructed to wash their hands if they touch potentially infectious lesions.

About 5 to 10 percent of adults will be susceptible to varicella-zoster virus. Susceptible child care staff members who are pregnant and are exposed to children with chickenpox should be referred to physicians or other health care professionals who are knowledgeable in the area of varicella infection during pregnancy within 24 hours after the exposure is recognized.

COMMENTS: Initial viral infection with varicella-zoster virus produces an acute fever and the appearance of chickenpox blisters; reactivation of the virus results in shingles (herpes zoster). See STANDARD 6.023, for more information on shingles. Routine use of varicella vaccine as recommended by the American Academy of Pediatrics (AAP) and the Centers for Disease Control and Prevention (CDC) will reduce the likelihood of transmission of wild type strains of varicella virus (76, 77, 78).

In mild cases with only a few sores and rapid recovery, an otherwise healthy child may be able to return to child care sooner once the lesions are crusted. Children whose immune system does not function properly and children with more severe cases of chickenpox shall be excluded from child care until lesions are crusted.

For additional information regarding varicella, consult the *Red Book* from the AAP. Contact information for the AAP is located in Appendix BB. For information about health education for children, staff, and parents, see STANDARD 2.060 through STANDARD 2.067.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

CYTOMEGALOVIRUS (CMV)

STANDARD 6.021 STAFF EDUCATION AND POLICIES ON CYTOMEGALOVIRUS (CMV)

Facilities that employ women of childbearing age shall educate these workers with regard to the following:

- The increased probability of exposure to cytomegalovirus (CMV) in the child care setting;
- The potential for fetal damage when CMV is acquired during pregnancy;
- Hygiene measures (especially handwashing and avoiding contact with urine, saliva, and nasal secretions) aimed at reducing the acquisition of CMV;
- The availability of counseling and testing for serum antibody to CMV to determine the child care provider's immune status.

Female employees of childbearing age shall be referred to their personal health care providers or to the health department authority for counseling about their risk of cytomegalovirus (CMV) infection. This counseling may include testing for serum antibodies to CMV to determine the employee's immunity against CMV infection.

RATIONALE: CMV is the leading cause of congenital infection in the United States, with approximately 1% of live born infants infected prenatally (79). While most infected fetuses escape resulting illness or disability, 10 to 20 percent will have hearing loss, mental retardation, cerebral palsy, or vision disturbances. Although maternal immunity does not prevent congenital CMV infection, evidence indicates that initial acquisition of CMV during pregnancy (primary maternal infection) carries the greatest risk for resulting illness or disability of the fetus (79).

Children enrolled in child care facilities are more likely to acquire CMV than are children cared for at home. Epidemiologic data, as well as laboratory testing of viral strains, has provided evidence for child-to-child transmission of CMV in the child care setting (79). Rates of CMV excretion have varied among facilities and even between class groups within a facility. Children between 1 and 3 years of age have the highest rates of excretion; published studies report rates between 20 to 80 percent in this age group. Children who acquire CMV from a maternal

source or in a facility may continue to excrete the virus for years (80). Thus, it is reasonable to conclude that child care staff members are more likely to come into contact with CMV-excreting children than are individuals in any other known situation or occupation.

Epidemiologic data and study of CMV strains have shown that premature newborn infants who acquire CMV in the nursery can transmit the virus to their parents (81). Moreover, parents of children attending centers have a higher rate of development of antibodies to CMV than parents of children kept at home (82). Parental infection with CMV is related to the child's CMV excretion (81, 82, 83).

With regard to child-to-staff transmission, studies have shown a high rate of infection with CMV among child care workers with annual rates ranging from 14 to 20 percent (84, 85, 86). Therefore, exposure to CMV with the higher rate of acquisition that occurs in child care staff will most likely lead to a higher rate of gestational CMV infection in staff members without antibodies to CMV and an increased rate of congenital CMV infection in their offspring (79). Women who have antibodies to CMV can be reassured that their risk of having an infant damaged by congenital CMV infection is low.

With current knowledge on the risk of CMV infection in child care staff members and the potential consequences of gestational CMV infection, child care staff members should receive counseling in regard to the risks.

COMMENTS: Assays for measuring antibody to CMV are available commercially and seem to perform well when used by qualified laboratories. They are accepted for screening blood products, transfusion recipients, and organ donors and recipients.

For additional information regarding CMV, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.022 ATTENDANCE AND TESTING OF CHILDREN WITH CMV

Testing children to detect CMV excretion or excluding children known to be CMV infected is not recommended. All infants and toddlers shall be assumed to be infected with CMV.

RATIONALE: Testing of urine and saliva for CMV excretion in children is expensive and is likely to be misleading, since excretion of CMV by children in child care is intermittent and common (82, 83).

COMMENTS: For additional information regarding CMV, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

ENTERIC (DIARRHEAL) AND HEPATITIS A VIRUS (HAV) INFECTIONS

Please note that if a staff member has no contact with the children, or with anything with which the children come in contact, the staff requirements in these standards do not apply to that staff member.

STANDARD 6.023 CONTROL OF ENTERIC (DIARRHEAL) AND HEPATITIS A VIRUS INFECTIONS

Facilities shall employ the following procedures, in addition to those stated in Inclusion/Exclusion/Dismissal, STANDARD 3.065 through STANDARD 3.068, to prevent and control infections of the gastrointestinal tract (including diarrhea) or liver:

- a) Children who cannot use a toilet for all bowel movements while attending the facility and who develop diarrhea shall be removed from the facility by their parent or legal guardian.

Pending arrival of the parent or legal guardian, the child shall not be permitted to have contact with other children or be placed in areas used by adults who have contact with children in the facility. This shall be accomplished by removing the ill child to a separate area of the child care center or, if not possible, to a separate area of the child's room. The area shall be one where the child is supervised by an adult known to the child, and where the toys, equipment, and surfaces will not be used by other children or adults until after the ill child leaves and after the surfaces have been disinfected. When moving a child to a separate area of the facility creates problems with supervision of the other children, as in small family child care homes, the ill child shall be kept as comfortable as possible, with minimal contact between ill and well children, until the parent or legal guardian arrives. The child who requires separation because of diarrhea shall be separated from the group upon the onset of the diarrhea. Caregivers with diarrhea as defined in STANDARD 3.069 shall be excluded. Separation and exclusion of children or caregivers shall not be deferred pending health assessment or laboratory testing to identify an enteric pathogen.

- b) A child who develops jaundice (when skin and white parts of the eye are yellow) while attending child care shall be separated from other children and the child's parent or legal guardian shall be called to remove the child. The child shall remain separated from the other children as described above until the parent or legal guardian arrives and removes the child from the facility.
- c) Exclusion for acute diarrhea shall continue until either the diarrhea stops or the continued loose stools are deemed not to be infectious by a licensed health care professional. Exclusion for hepatitis A virus (HAV) as specified in item b) above shall continue for one week after onset of illness or until immune globulin has been administered to appropriate children and staff at the facility. See also STANDARD 3.065, on inclusion/exclusion/dismissal of children with diarrhea.
- d) Alternate care for children with diarrhea or hepatitis A in special facilities for ill children shall be provided only in facilities that can provide separate care for children with infections of the gastrointestinal tract

(including diarrhea) or liver. See also STANDARD 3.070 through STANDARD 3.080, on caring for ill children.

- e) Children and caregivers who excrete intestinal pathogens but no longer have diarrhea generally may be allowed to return to child care once the diarrhea resolves, except for the case of infections with *Shigella*, *E. coli* 0157:H7 or *Salmonella typhi*. For *Shigella* and *E. coli* 0157:H7 two negative stool cultures are required for readmission, unless state requirements differ. For *Salmonella typhi*, three negative cultures are required. For *Salmonella* species other than *S. typhi* stool cultures are not required from asymptomatic individuals.
- f) The local health department shall be informed within 24 hours of the occurrence of hepatitis A virus infection or an increased frequency of diarrheal illness in children or staff in a child care facility.
- g) In addition to the recommended postexposure prophylaxis, hepatitis A immunization shall be considered in child care settings with ongoing or recurrent outbreaks, especially in communities where routine immunization of children for hepatitis A is recommended (87). In the absence of ongoing outbreaks, immunization in child care centers shall be used to implement routine hepatitis A immunization, particularly in communities where cases in the child care facility contribute substantially to the total number of hepatitis A cases and seem play a role in sustaining community-wide outbreaks.
- h) If there has been an exposure to a case of hepatitis A or diarrhea in the child care facility, caregivers shall inform parents of other children in the facility, in cooperation with the health department, that their children may have been exposed to children with hepatitis A virus (HAV) infection or diarrheal illness.
- i) These procedures shall be implemented in addition to those stated in STANDARD 3.065 through STANDARD 3.068.

RATIONALE: Intestinal organisms, including hepatitis A virus, cause disease in children, child care providers, and close family members (88, 89, 90, 91). The primary age groups involved are children younger than 3 years of age who wear diapers. Disease has occurred in outbreaks within centers and as sporadic episodes. Although many intestinal agents can cause diarrhea in children in child care, rotavirus, other enteric viruses, *Giardia lamblia*, *Shigella*, and

Cryptosporidium have been the main organisms implicated in outbreaks. In addition, excretion of intestinal agents, particularly *Giardia lamblia* and rotavirus, has been shown to occur in children who show no symptoms (92, 93). The significance of this phenomenon in transmission is unknown. Child care providers should observe children for signs of disease to permit early detection and implementation of control measures. Facilities should consult the local health department to determine whether the increased frequency of diarrheal illness requires public health intervention.

The most important characteristic of child care facilities associated with increased frequencies of diarrhea or hepatitis A is the presence of young children who are not toilet-trained (90, 94). Contamination of hands, communal toys, and other classroom objects is common and plays a role in the transmission of enteric pathogens in child care facilities.

Studies commonly find that fecal contamination of the environment is frequent in centers and is highest in infant and toddler areas where diarrhea or hepatitis A are known to occur most often (95, 96). Studies indicate that the risk of diarrhea is significantly higher for children in centers than in age-matched children cared for at home or in small family child care homes (51). The spread of infection from children who are not toilet-trained to other children in child care facilities or to their families is common, particularly when *Shigella*, rotavirus and other enteric viruses, *Giardia lamblia*, *Cryptosporidium*, or hepatitis A virus (HAV) is the causal agent (88).

To decrease diarrheal disease in child care, the staff and parents must be educated about modes of transmission as well as practical methods of prevention and control. Staff training in handwashing and hygiene, combined with close monitoring of staff compliance, is associated with a significant decrease in infant and toddler diarrhea (97, 98). Staff training on a single occasion, without close staff monitoring, however, does not result in a decrease in diarrhea rates; this finding emphasizes the importance of monitoring as well as education (97,98). Therefore, appropriate hygienic practices, hygiene monitoring, and education are important in limiting infections of the intestines or liver in child care.

The Centers for Disease Control and Prevention (CDC) recommends excluding children with diarrhea (for any reason) from child care until diarrhea has resolved. This standard is more lenient than the CDC recommendation by allowing children whose feces are contained by use of a toilet to remain in care. Because outbreaks are rare in groups of toilet-trained children,

a more lenient approach may be taken in this age group.

COMMENTS: See also the environmental and personal hygiene standards given in the following standards to prevent and control infections of the gastrointestinal tract (including diarrhea) or liver:

- 1) STANDARD 3.070 through STANDARD 3.080, on caring for ill children;
- 2) STANDARD 3.012 through STANDARD 3.019, on toileting and diapering,
- 3) STANDARD 3.020 through STANDARD 3.024, on handwashing;
- 4) STANDARD 3.028 through STANDARD 3.040, on sanitation, disinfection, and maintenance;
- 5) STANDARD 4.050 through STANDARD 4.060, on food safety;
- 6) STANDARD 3.042 through STANDARD 3.044, on animals;
- 7) STANDARD 8.046 through STANDARD 8.052, on child records;
- 8) STANDARD 5.219 through STANDARD 5.225, on interior maintenance;
- 9) STANDARD 8.035 and STANDARD 8.036, on food handling, feeding, and nutrition policies.

Sample letters of notification to parents that their child may have been exposed to an infectious disease are contained in the (National Academy for the Education of Young Children (NAEYC) publication, *Healthy Young Children*. Contact information is located in Appendix BB.

For information about health education for children, staff, and parents, see STANDARD 2.060 through STANDARD 2.067.

For additional information regarding enteric (diarrheal) and hepatitis A virus (HAV) infections, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.024 STAFF EDUCATION AND POLICIES ON ENTERIC (DIARRHEAL) AND HAV INFECTIONS

Facilities shall adhere to the following staff educational policies to prevent and control infections of the gastrointestinal tract (mainly diarrhea) or liver:

- a) The facility shall conduct ongoing continuing education for staff members, to include the following:
 - 1) Methods of transmission of pathogens that cause diarrhea and hepatitis A virus;
 - 2) Recognition and prevention of diarrhea and disease associated with hepatitis A virus infection;
- b) All caregivers, food handlers, and maintenance staff shall receive ongoing education and monitoring concerning handwashing and cleaning of environmental surfaces as specified in the facility's plan. See STANDARD 3.020 through STANDARD 3.023, on handwashing; and STANDARD 3.028 through STANDARD 3.040, on sanitation, disinfection, and maintenance;
- c) At least annually, the director shall review all procedures related to preventing diarrhea and hepatitis A virus infections. Each caregiver, food handler, and maintenance person shall review a written copy of these procedures or view a video, which shall include age-specific criteria for inclusion and exclusion of children who have a diarrheal illness or hepatitis A virus infection and infection control procedures. See Child Inclusion/Exclusion/Dismissal, STANDARD 3.065 through STANDARD 3.068;
- d) Guidelines for administration of immune globulin and immunization against hepatitis A virus shall be enforced to prevent infection in contacts of children with hepatitis A disease (87, 99).

RATIONALE: Staff training in hygiene and monitoring of staff compliance have been shown to reduce the spread of diarrhea (94, 97, 98, 100). These studies suggest that training combined with outside monitoring of child care practices can modify staff behavior as well as the occurrence of disease.

Child care providers should observe children for signs of disease to permit early detection and

implementation of control measures. Facilities should consult the local health department to determine whether the increased frequency of diarrheal illness requires public health intervention.

COMMENTS: For additional information regarding enteric (diarrheal) and hepatitis A virus (HAV) infections, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.025 DISEASE SURVEILLANCE OF ENTERIC (DIARRHEAL) AND HAV INFECTIONS

The child care facility shall cooperate with local health authorities in notifying all staff and parents of other children who attend the facility of possible exposure to hepatitis A, and diarrheal agents such as *E. coli: 0157:H7*, *Shigella*, rotavirus and other enteric viruses, *Salmonella*, *Campylobacter*, *Giardia lamblia*, and *Cryptosporidium*.

RATIONALE: Intestinal organisms, including hepatitis A virus, cause disease in children, child care providers, and close family members (88, 89, 90, 91). Disease has occurred in outbreaks within centers and as sporadic episodes (88, 92, 101). Although many intestinal agents can cause diarrhea in children in child care, rotavirus, other enteric viruses, *Giardia lamblia*, *Shigella*, and *Cryptosporidium* have been the main organisms implicated in outbreaks.

Child care providers should observe children for signs of disease to permit early detection and implementation of control measures. Facilities should consult the local health department to determine whether the increased frequency of diarrheal illness requires public health intervention.

COMMENTS: Sample letters of notification to parents that their child may have been exposed to an infectious disease are contained in the (National Academy for the Education of Young Children (NAEYC) publication, *Healthy Young Children*. Contact information is located in Appendix BB.

For information about health education for children, staff, and parents, see STANDARD 2.060 through STANDARD 2.067.

For additional information on enteric (diarrheal) and hepatitis A virus infections, see Training, STANDARD 1.023 through STANDARD 1.033; and Notification of Parents, STANDARD 3.084 and STANDARD 3.085. Also, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.026 MAINTENANCE OF RECORDS ON INCIDENTS OF DIARRHEA

The facility shall maintain a record of children and caregivers who have diarrhea while at home or at the facility. This record shall include:

- a) The child or caregiver's name;
- b) Dates the child or caregiver is ill;
- c) Reason for diarrhea, if known;
- d) Whether the child or caregiver was in attendance at the child care facility during the diarrhea episode;
- e) Any leakage of feces from the diaper while the child was in attendance at the child care facility.

The facility shall notify the local health department authorities whenever there have been two or more children with diarrhea in a given classroom or three or more unrelated children (not siblings) within the facility within a 2-week period.

RATIONALE: Disease surveillance and reporting to the local health department authorities are critical in preventing and controlling diseases in the child care setting. A major purpose of surveillance is to allow early detection of disease and prompt implementation of control measures. Ascertaining whether a child who attends a facility is ill is important when evaluating childhood illnesses; ascertaining whether an adult who works in a facility or is a parent of a child attending a facility is ill is important when considering a diagnosis of hepatitis A and other diseases transmitted by the fecal-oral route. Causes of these infections in household contacts may require

questioning about illness in the child attending child care and testing the child for infection. Information concerning communicable disease in a child care attendee, staff member, or household contact should be communicated to public health authorities, to the child care director, to all staff and to all parents with children in the facility.

COMMENTS: For more information on reporting requirements for communicable disease, see STANDARD 3.086 and STANDARD 3.087.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

BLOODBORNE INFECTIONS

Hepatitis B virus, HIV, and hepatitis C virus are bloodborne pathogens. Although the risk of contact with blood containing one of these viruses is low in the child care setting, appropriate infection control practices will prevent transmission of bloodborne pathogens if exposure occurs (102, 103, 104, 105).

Please note that if a staff member has no contact with the children, or with anything with which the children come in contact, these standards do not apply to that staff member.

HEPATITIS B VIRUS (HBV)

STANDARD 6.027 DISEASE RECOGNITION AND CONTROL OF HBV INFECTION

Facilities shall have written policies for inclusion and exclusion of children known to be infected with hepatitis B virus (HBV) and immunization of children with hepatitis B vaccine as part of their routine immunization schedule. When a child who is an HBV carrier is admitted to a facility, the facility director or the caregiver usually responsible for the child shall be informed.

Children who carry HBV chronically and who have no behavioral or medical risk factors, such as

aggressive behavior (biting and frequent scratching), generalized dermatitis (weeping skin lesions), or bleeding problems shall be admitted to the facility without restrictions.

Testing of children for HBV shall not be a prerequisite for admission to facilities.

With regard to infection control measures, every person shall be assumed to be an HBV carrier. Child care personnel shall adopt standard precautions, as outlined in Prevention of Exposure to Blood, STANDARD 3.026 and STANDARD 3.027.

Toys and objects that young children (infants and toddlers) mouth shall be cleaned and sanitized, as stated in STANDARD 3.036 through STANDARD 3.038.

Toothbrushes shall be individually labeled so that the children do not share toothbrushes, as specified in STANDARD 5.095.

RATIONALE: Transmission of HBV in the child care setting is of concern to public health authorities. Children who are HBV carriers (particularly children born in countries highly endemic for HBV) can be expected to require child care (105, 106, 107, 108, 109). The risk of transmitting the disease in child care is theoretically small, though, because blood or infected body fluid must get inside another body for it to transmit HBV infection and because immunization of infants as part of the routine childhood immunization schedule has decreased the number of susceptible children. Immunization not only will reduce the potential for transmission but also will allay anxiety about transmission from children and staff in the child care setting who may be carriers of hepatitis B.

The risk of disease transmission from an HBV-carrier child or staff member with no behavioral risk factors and without generalized dermatitis or bleeding problems is considered very low. This extremely low risk does not justify exclusion of an HBV-carrier child from out-of-home care, nor does it justify the routine screening of children as possible HBV carriers prior to admission to child care.

HBV transmission in a child care setting is most likely to occur through direct exposure via bites or scratches that break the skin and introduce blood or body secretions from the HBV carrier into the victim. Indirect transmission via blood or saliva through environmental contamination may be possible but has

not been documented. Saliva contains much less virus (1/1000) than blood; therefore, the potential infection from saliva is lower. In gibbons and chimpanzees, saliva has been shown to be infectious only when inoculated through the skin; it has not caused infection when administered by aerosol through the nose or mouth, by ingestion through the mouth, or by toothbrush on the gums (105).

No data are available to indicate the risk of transmission if a susceptible person bites an HBV carrier. When the HBV statuses of both the biting child and the victim are unknown, the risk of HBV transmission would be extremely low because of the expected low incidence of HBV carriage by children of preschool-age and the low efficiency of disease transmission by bite exposure. Because a bite in this situation is extremely unlikely to involve an HBV-carrier child, screening is not warranted, particularly in children who are immunized appropriately against HBV (105).

COMMENTS: Parents are not required to share information about their child's HBV status, but they should be encouraged to do so.

For additional information regarding HBV, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.028 OBSERVATION AND FOLLOW-UP OF A CHILD WHO IS AN HBV CARRIER

The primary caregiver shall observe a child who is a known hepatitis B virus (HBV) carrier and the other children in the group for development of aggressive behavior (such as biting or frequent scratching) that might facilitate transmission of HBV. When this type of behavior occurs, the child's health care provider or the health department shall evaluate the need for immediate disease prevention measures with hepatitis B immune globulin and shall reevaluate the child's continuing attendance in the facility.

RATIONALE: Regular assessment of behavioral risk factors and medical conditions of enrolled children who are HBV carriers is important. It is helpful if the center director and primary caregivers are informed that a known HBV-carrier child is in care. However, parents are not required to share this information. Most children in child care facilities have been immunized against hepatitis B as part of their routine immunization schedule, minimizing the risk of transmission (105).

COMMENTS: For additional information regarding HBV infections, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.029 STAFF EDUCATION ON PREVENTION OF BLOODBORNE DISEASES

All caregivers shall receive regular training on how to prevent transmission of bloodborne diseases, including hepatitis B virus (HBV).

RATIONALE: Efforts to reduce the risk of transmitting diseases in child care through hygienic and environmental standards in general should focus primarily on blood precautions and ensuring that children are appropriately immunized against hepatitis B virus.

COMMENTS: For additional information regarding HBV infections, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB. also Continuing Education, STANDARD 1.029 through STANDARD 1.033.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.030 INFORMING PUBLIC HEALTH AUTHORITIES OF HBV CASES

Staff members known to have acute or chronic hepatitis B virus (HBV) shall not be restricted from work but shall receive training on how to prevent transmission of bloodborne diseases. Cases of acute HBV in any child or employee of a facility shall be reported to the health department for a determination of the need for further investigation or preventive measures.

RATIONALE: The risk of disease transmission from a HBV carrier child or staff member with normal behavior and without generalized dermatitis or bleeding problems is considered very low. This extremely low risk does not justify exclusion of an HBV-carrier staff member from providing child care, nor does it justify the routine screening of staff as possible HBV carriers prior to admission to child care.

COMMENTS: For additional information regarding HBV infections, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

See also Continuing Education, STANDARD 1.029 through STANDARD 1.033; Prevention of Exposure to Blood, STANDARD 3.026 and STANDARD 3.027; Reporting Illness, STANDARD 3.086 and STANDARD 3.087.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

HYGIENE FOR HEPATITIS B VIRUS (HBV) INFECTION

STANDARD 6.031 HANDLING OF INJURIES TO A HBV CARRIER

Injuries that lead to bleeding by a hepatitis B virus (HBV) carrier child or adult shall be handled promptly in the manner recommended for any

such injury in any child or adult using standard precautions.

RATIONALE: Efforts to reduce the risk of transmitting diseases in child care through hygienic and environmental standards in general should focus primarily on blood precautions and ensuring appropriate immunization against hepatitis B virus.

COMMENTS: For additional information regarding HBV infections, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB. See STANDARD 3.026 and STANDARD 3.027, on the prevention of exposure to blood.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

HEPATITIS C VIRUS (HCV)

STANDARD 6.032 INFECTION CONTROL MEASURES WITH HCV

Standard precautions, as outlined in STANDARD 3.026, shall be followed to prevent infection with hepatitis C virus (HCV) infection. Children with HCV infection shall not be excluded from out-of-home child care.

RATIONALE: Transmission risks of HCV infection in a child care setting are unknown. The general risk of HCV infection from percutaneous exposure to infected blood is estimated to be 10 times greater than that of HIV but lower than that of hepatitis B virus (HBV) (104). Transmission of HCV via contamination of mucous membranes or broken skin probably has an intermediate risk between that for blood infected with HIV and HBV.

COMMENTS: For additional information regarding HCV infections, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

HUMAN IMMUNODEFICIENCY VIRUS (HIV)

ADMINISTRATIVE POLICIES ON HIV INFECTIONS

STANDARD 6.033 ATTENDANCE OF CHILDREN WITH HIV

Children infected with human immunodeficiency virus (HIV) shall be admitted to child care provided that their health, neurological development, behavior, and immune status are acceptable, as determined on a case-by-case basis by persons knowledgeable in the area of HIV infection, including the child's health care provider. These individuals must be able to evaluate whether the child will receive optimal care in the specific facility being considered and whether an HIV-infected child poses a potential threat to others.

RATIONALE: No reported cases of HIV infection are known to have resulted from transmission in out-of-home child care. Although the risk of transmission of HIV infection to children in the child care setting seems to be extremely low, data does not exist that directly addresses this issue. Guidelines can most reasonably provide methods to reduce the risk of transmission of HIV infection to caregivers in out-of-home child care (102).

COMMENTS: For additional information regarding HIV, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.034 PROTECTING HIV-INFECTED CHILDREN AND ADULTS IN CHILD CARE

Parents of all children, including human immunodeficiency virus (HIV) infected children,

shall be notified immediately if the child has been exposed to chickenpox, tuberculosis, fifth disease (parvovirus B19), diarrheal disease, measles, or other infectious diseases through other children in the facility.

Children whose immune systems do not function properly to prevent infection and who are exposed to measles or chickenpox shall be referred immediately to their health care provider to receive the appropriate preventive measure (immune globulin or immunization) following exposure and decision about readmission to the child care facility (76, 110).

Caregivers known to be HIV-infected shall be notified immediately if they have been exposed to chickenpox, fifth disease, tuberculosis, diarrheal disease, or measles through children in the facility. If they have been exposed to measles or chickenpox, they shall receive an appropriate preventive measure (immune globulin or immunization) after exposure (76, 110). Their return to work after exposure shall be determined jointly by the director of the center (or, in the cases of large family child care homes and small family child care homes, the primary caregiver) and the health care provider for the HIV-infected caregiver.

Information regarding a child whose immune system does not function properly to prevent infection, whatever the cause, shall be available to caregivers who need to know so they can reduce the likelihood of transmission of infection to the child. Accordingly, infections in other children and staff members in the facility shall be brought to the prompt attention of the parent of the child whose immune system does not function properly. The parent may elect to seek medical advice regarding the child's continued participation in the facility. Injuries that lead to bleeding by a child with human immunodeficiency virus (HIV) shall be handled promptly in the manner recommended for any such injury in any child using standard precautions.

RATIONALE: The immune system of children and adults who are infected with HIV often does not function properly to prevent infections. Children and adults with immunosuppression for multiple other reasons are at greater risk for severe complications from several infections including chickenpox, CMV, tuberculosis, *Cryptosporidium*, *Salmonella*, and measles

virus (111). Available data indicate that infection with measles is a more serious illness in HIV-infected children than in children who are not HIV-infected. The first deaths from measles in the United States reported to the Centers for Disease Control and Prevention (CDC) after 1985 were in HIV-infected children (110).

Caregivers should know about a child's special health needs so they can offer protection for that child. Care-givers' need to know does not require knowledge of a child's HIV status, because children whose immune system does not function properly because of other acquired and congenital causes may be in the facility. Standard precautions should be adopted in caring for all adults and all children in out-of-home child care when blood or blood-containing body fluids are handled to minimize the possibility of transmission of any bloodborne disease (102).

COMMENTS: Staff should have training on standard precautions for bloodborne pathogens, HIV and other causes of immune deficiency, confidentiality and implications of suspicions about HIV status.

All caregivers should be taught the basic principles of individuals' rights to confidentiality. See STANDARD 8.054 and STANDARD 8.055.

For additional information on administrative policies on HIV infection, see Confidentiality and Access to Records, STANDARD 8.053 through STANDARD 8.057. See STANDARD 3.026 and STANDARD 3.027, on prevention of exposure to blood. Also consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

PREVENTING TRANSMISSION OF HIV INFECTION

STANDARD 6.035 STAFF EDUCATION ABOUT PREVENTING TRANSMISSION OF HIV INFECTION

Caregivers shall be knowledgeable about routes of transmission and about prevention of transmission of bloodborne pathogens, including human immunodeficiency virus (HIV) and shall practice measures recommended by the U.S. Public Health Service for prevention of transmission of these infections.

RATIONALE: Unwarranted fear about HIV transmission in child care should be dispelled. Studies examining transmission of HIV support the concept that HIV is not a highly infectious agent (107). The major routes of transmission are through sexual contact, through contact with blood or body fluids containing blood, and from mother to child during the birth process. Several studies have shown that HIV-infected persons do not spread the HIV virus to other members of their households except through sexual contact.

HIV has been isolated in low volumes in saliva, urine, and human milk. Transmission of HIV through saliva seems to be uncommon. Cases suggest that contact with blood from an HIV-infected individual is a possible mode of transmission through contact between broken skin and blood or blood-containing fluids. Theoretically, biting is a possible mode of transmission of bloodborne illness, such as HIV infection. However, the risk of such transmission is believed to be rare. If a bite results in blood exposure to either person involved, the U.S. Public Health Service recommends postexposure follow-up, including consideration of postexposure prophylaxis (112).

COMMENTS: For additional information regarding HIV, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB. See STANDARD 1.029 through STANDARD 1.033, on Continuing Education and STANDARD 3.026 and STANDARD 3.027, on the prevention of exposure to blood.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.036 ABILITY OF CAREGIVERS WITH HIV INFECTION TO CARE FOR CHILDREN

Human immunodeficiency virus (HIV) infected adults with no symptoms of illness may care for children in facilities provided they do not have open skin sores or other conditions that would allow contact of their body fluids with children or other adults.

RATIONALE: Based on available data, there is no reason to believe that HIV-infected adults will transmit HIV in the course of their normal child care duties. Therefore, HIV-infected adults who do not have open skin sores that cannot be covered or other conditions that would allow contact with their body fluids may care for children in facilities. Immunosuppressed adults with acquired immunodeficiency syndrome (AIDS) may be more likely to acquire infectious agents from children and should consult with their own health care providers regarding the advisability of their continuing to work in a facility (111).

COMMENTS: For additional information regarding HIV, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

SKIN INFECTIONS

SCABIES

STANDARD 6.037 ATTENDANCE OF CHILDREN WITH SCABIES

Children with scabies shall be removed from the child care facility until appropriate treatment has been administered. Children shall be allowed to return to child care after treatment has been completed.

RATIONALE: Scabies is caused by a mite which is associated with an intensely itchy, red rash. Transmission usually occurs through prolonged close personal contact. Epidemics and localized outbreaks may require stringent and consistent measures to treat contacts. Caregivers who have had prolonged skin-to-skin contact with infested persons may benefit from prophylactic treatment. Environmental disinfestation is unnecessary and unwarranted. Bedding and clothing that is worn next to the skin before treatment should be washed.

COMMENTS: For additional information regarding scabies, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

PEDICULOSIS CAPITIS (HEAD LICE)

STANDARD 6.038 ATTENDANCE OF CHILDREN WITH HEAD LICE

Children shall not be excluded immediately or sent home early from child care because of head lice. Parents of affected children shall be notified and informed that their child must be treated properly before returning to the child care facility the next day.

Children and staff who have been in close contact with an affected child shall be examined and treated if infested. Infestation shall be identified by the presence of adult lice or nits (eggs) on a hair shaft 3 to 4 mm from the scalp (112).

RATIONALE: Head lice infestation in children attending child care is common in the U.S. and is not a sign of poor hygiene. Head lice are not a health hazard because they are not responsible for spread of any disease. After proper application of an appropriate pediculicide, reinfestation of children from an untreated infested person is more common than treatment failure.

COMMENTS: Differentiation of nits from benign hair casts (a layer of cells that easily slides off the hair shaft), plugs of skin cells, and debris can be difficult (112).

For additional information regarding head lice, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

RINGWORM

STANDARD 6.039 ATTENDANCE OF CHILDREN WITH RINGWORM

Children with ringworm of the scalp or body shall receive appropriate treatment. Children receiving treatment shall not be excluded from child care.

Children and staff in close contact with an affected child shall receive periodic inspections for early lesions and receive prompt therapy.

RATIONALE: Ringworm infection results from a fungus that is transmitted by contact with an infected person (scalp and body) and by contact with infected animals (body). Treatment of ringworm of the scalp with oral medicine for 4 to 6 weeks and of ringworm of the body with topical medicine for 4 weeks is effective.

COMMENTS: Ribbons, combs, and hairbrushes should not be shared among children and staff.

For additional information regarding ringworm, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

INJURIES

STANDARD 5.080 FACILITY ARRANGEMENTS TO MINIMIZE BACK INJURIES

The child care setting shall be organized to reduce the risk of back injuries for adults provided that such measures do not pose hazards for children or affect the implementation of developmentally appropriate practice. Furnishings and equipment shall enable caregivers to hold and comfort children and enable their activities while minimizing the need for bending and for lifting and carrying heavy children and objects. Caregivers shall not routinely be required to use child-sized chairs, tables, or desks.

RATIONALE: Back strain can arise from adult use of child-sized furniture. Analysis of worker compensation claims shows that employees in the service industries, including child care, have an injury rate as great as or greater than that of workers employed in factories. Back injuries are the leading type of injury (38). Appropriate design of work activities and training of workers can prevent most back injuries. The principles to support these recommendations (see Comments) are standard principles of ergonomics, in which jobs and workplaces are designed to eliminate biomechanical hazards.

In a statewide (Wisconsin) survey of health status, behaviors and concerns, 446 randomly selected early childhood professionals, directors, center teachers, and family providers, reported dramatic changes in

frequency of backache and fatigue symptoms since working in child care (39).

COMMENTS: Some approaches to reduce risk are:

- Adult-height changing tables;
- Small, stable stepladders, stairs, and similar equipment to enable children to climb to the changing table or other places to which they would otherwise be lifted, without creating a fall hazard;
- Convenient equipment for moving children, reducing the necessity of carrying them;
- Adult furniture that eliminates awkward sitting or working positions in all areas where adults work.

This standard is not intended to interfere with child adult interactions or to create hazards for children. Modifications can be made in the environment to minimize hazards and injuries for both children and adults. Adult furniture has to be available at least for break times, staff meetings, etc.

See also Staff Health, STANDARD 1.045 through STANDARD 1.049.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 8.010 POLICY ON CHILDRENS' ACTS OF AGGRESSION

The facility shall have policies for dealing with acts of aggression and fighting (such as biting and hitting) by children. These policies shall include:

- Separation of the children involved;
- Immediate attention to the individual child or caregiver who was bitten;
- Notification to parents of children involved in the incident, if an injury requires first aid or medical attention, as specified in Incidence Logs of Illness, Injury, and Other Situations That Require Documentation, STANDARD 8.061 through STANDARD 8.064;
- Review of the adequacy of the caregiver supervision and appropriateness of facility activities;
- Administrative policy for dealing with recurrences.

RATIONALE: Aggressive acts, both intentional and unintentional, occur in out-of-home care settings (113, 114). Administrative guidelines are necessary for the management of recurrent acts of aggression and should be developed within the facility based on the resources and structure of the facility. Potential injuries and infections that may be incurred when caring for young children are health and safety hazards for caregivers. Training and educational materials should be provided to caregivers to help them understand how best to prevent and respond to these situations.

COMMENTS: In general, reducing child:staff ratios and child group sizes, having training for caregivers, and using positive guidance and discipline techniques that care for the victim and avoid rewarding the aggressor with attention, will help to decrease acts of aggression (such as biting and hitting). For additional information on discipline policy, see also Discipline, STANDARD 2.039 through STANDARD 2.043.

Biting and hitting are manifestations of different emotional feelings at different ages. Biting is a common behavior in the infant or toddler who is expressing a feeling. Hitting may be an immature behavior with no malicious intent.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

NOISE LEVELS

STANDARD 5.046 NOISE LEVELS

Measures shall be taken in all rooms or areas accommodating children to maintain the decibel (db) level at or below 35 to 40 db for at least 80% of the time as measured by an acoustical engineer or, more practically, by the ability to be clearly heard and understood in a normal conversation without raising one's voice. These measures include acoustical ceiling, carpeting, wall covering, partitions, or draperies, or a combination thereof.

RATIONALE: Excessive sound levels can be damaging to hearing, reduce effective communication, and reduce psychosocial well-being. The level of hearing

loss commonly experienced by children with fluid in their middle ear space is 35 db. This level of hearing loss correlates with decreased understanding of language. By inference, this level of ambient noise may interfere with the ability of children to hear well enough to develop language normally.

For those with normal hearing, the stressful effects of noise will, at a minimum, add to, and at a maximum, precipitate other stress factors present in the facility. Exposure to excessive levels of noise may have adverse physiologic effects, such as increasing blood pressure. In addition, uncontrolled noise will continually force the caregiver to speak at levels above those normally used for conversation and may increase the risk of throat irritation. This may be a particularly serious consequence when the caregiver's exposure to infectious agents is considered at the same time.

While carpets can help reduce the level of noise, they can absorb moisture and serve as a place for microorganisms to grow. Consider using area rugs that can be taken up and washed often.

COMMENTS: Noise should be measured according to the *Code of Federal Regulations (CFR)*, Title 16, Section 1500.47. To obtain this publication, contact the Superintendent of Documents of the U.S. Government Printing Office. Contact information is located in Appendix BB.

When there is new construction or renovation of a facility, consideration should be given to a design that will reduce noise from outside.

Sound control measures should follow the pertinent American Society for Testing and Materials (ASTM) standards for noise, acoustics, and the like, as indicated below:

- E477-99 *Standard Test Method for Measuring Acoustical and Air Flow Performance of Duct Liner Materials and Prefabricated Silencers*
- E1042-92 *Standard Classification of Acoustically Absorptive Materials Applied by Towel or Spray*
- E1264-98 *Standard Classification of Acoustical Ceiling Products*

- E1124-97 *Standard Test Method for Field Measurement of Sound Power Level by the Two-Surface Method*
- E1007-97 *Standard Test Method for Field Measurement of Tapping Machine Impact Sound Transmission in Floor-Ceiling Assemblies and Associated Structures*
- E1050-98 *Standard Test Method for Impedance and Absorption of Acoustical Materials using a Tube, Two Microphones, and a Digital Frequency Analysis System*
- C384-98 *Standard Test Method for Impedance and Absorption of Acoustical Materials by the Impedance Tube Method*
- E1130-90 *Standard Test Method for Objective Measurement of Speech Privacy in Open Offices using Articulation Index*
- E1014-84 *Standard Guide for Measurement of Outdoor A-Weighted Sound Levels*
- E1041-85 *Standard Test Method for Evaluating Masking Sound in Open Offices*
- E596-96 *Standard Test Method for Laboratory Measurement of Noise Reduction of Sound-Isolating Enclosures*

For further information, contact the American Society for Testing and Materials. Contact information is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STRESS

STANDARD I.049 STRESS

The following measures to lessen stress for the staff shall be implemented to the maximum extent possible:

- a) Wages and benefits that fairly compensate the skills, knowledge, and performance required of caregivers, at the levels of wages and benefits paid for other jobs that require comparable skills, knowledge, and performance;
- b) Job security;

- c) Training to improve skills and hazard recognition;
- d) Stress management and reduction training;
- e) Regular work breaks;
- f) Appropriate child:staff ratios;
- g) Liability insurance for caregivers;
- h) Staff lounge separate from child care area;
- i) The use of sound-absorbing materials;
- j) Regular performance reviews which, in addition to addressing any areas requiring improvement, provide constructive feedback, individualized encouragement and appreciation for aspects of the job well performed;
- k) Stated provisions for back-up staff, for example, to allow caregivers to take necessary time off when ill without compromising the function of the center or incurring personal negative consequences from the employer. This back-up shall also include a stated plan to be implemented in the event a staff member needs to have a short, but relatively immediate break away from the children.

RATIONALE: One of the best indicators of quality child care is consistent staff with low turnover rates. The National Child Care Staffing Study found that staff turnover increased from 26% in 1992 to 31% in 1997 (123). Despite having higher levels of formal education than the average American worker, a large percentage of teaching staff members earn an average \$5.15 an hour (123).

Stress reduction measures (particularly adequate wages) are essential to decrease staff turnover and thereby promote quality care (123). The health, welfare, and safety of adult workers in child care determine their ability to provide care for the children. Serious physical abuse usually occurs when the caregiver is under high stress. Regular breaks with substitutes should be available when the caregiver cannot continue to provide care.

Sound-absorbing materials, break times, and a separate lounge allow for respite from noise and from non-auditory stress. Unwanted sound, or noise, can be damaging to hearing as well as to psychosocial well-being. The stress effects of noise will aggravate other stress factors present in the facility. Lack of adequate sound reduction measures in the facility can force the caregiver to speak at levels above those

normally used for conversation, and thus may increase the risk of throat irritation. When caregivers raise their voices to be heard, the children tend to raise theirs, escalating the problem.

COMMENTS: Documentation of implementation of such measures shall be on file in the facility. Injury-preventive and hygienic activities recommended for the children also protect the staff.

See Child:Staff Ratio and Group Size, STANDARD 1.001 through STANDARD 1.005.

TYPE OF FACILITY: *Center*

STANDARD 3.058 DEALING WITH CAREGIVER STRESS

Caregivers shall have ways of taking breaks and finding relief at times of high stress (for example, they shall be allowed 15 minutes of break time every four hours, in addition to a lunch break of at least 30 minutes). In addition, there shall be a written plan/policy in place for the situation in which a caregiver recognizes that he/she (or a colleague) is stressed and needs help immediately. The plan shall allow for caregivers who feel they may lose control to have a short, but relatively immediate break away from the children.

RATIONALE: Serious physical abuse usually occurs at a time of high stress for the caregiver.

COMMENTS: For more information on stress management, see STANDARD 1.049.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

EXCLUSION DUE TO ILLNESS

STANDARD 3.069 STAFF EXCLUSION FOR ILLNESS

Please note that if a staff member has no contact with the children, or with anything with which the children

come into contact, this standard does not apply to that staff member.

A facility shall not deny admission to or send home a staff member or substitute with illness unless one or more of the following conditions exists (37). The staff member shall be excluded as follows:

- a) Chickenpox, until all lesions have dried and crusted, which usually occurs by 6 days;
- b) Shingles, only if the lesions cannot be covered by clothing or a dressing until the lesions have crusted;
- c) Rash with fever or joint pain, until diagnosed not to be measles or rubella;
- d) Measles, until 4 days after onset of the rash (if the staff member or substitute is immunocompetent);
- e) Rubella, until 6 days after onset of rash;
- f) Diarrheal illness, three or more episodes of diarrhea during the previous 24 hours or blood in stools, until diarrhea resolves; if *E.coli O157:H7* or *Shigella* is isolated, until diarrhea resolves and two stool cultures are negative;
- g) Vomiting illness, two or more episodes of vomiting during the previous 24 hours, until vomiting resolves or is determined to result from noncommunicable conditions such as pregnancy or a digestive disorder;
- h) Hepatitis A virus, until 1 week after onset or as directed by the health department when immunoglobulin has been given to appropriate children and staff in the facility;
- i) Pertussis, until after 5 days of appropriate antibiotic therapy (which is to be given for a total of 14 days) and until disease preventive measures, including preventive antibiotics and vaccines for children and staff who have been in contact with children infected with pertussis, have been implemented;
- j) Skin infection (such as impetigo), until 24 hours after treatment has been initiated;
- k) Tuberculosis, until noninfectious and cleared by a health department official;
- l) Strep throat or other streptococcal infection, until 24 hours after initial antibiotic treatment and end of fever;
- m) Head lice, from the end of the day of discovery until after the first treatment;
- n) Scabies, until after treatment has been completed;
- o) Purulent conjunctivitis, defined as pink or red conjunctiva with white or yellow eye

discharge, often with matted eyelids after sleep, and including eye pain or redness of the eyelids or skin surrounding the eye, until 24 hours after treatment has been initiated;

- p) *Haemophilus influenzae* type b (Hib), prophylaxis, until antibiotic treatment has been initiated;
- q) Meningococcal infection, until all staff members, for whom antibiotic prophylaxis has been recommended, have been treated. See STANDARD 6.006 through STANDARD 6.008;
- r) Respiratory illness, if the illness limits the staff member's ability to provide an acceptable level of child care and compromises the health and safety of the children.

Child care providers who have herpes cold sores shall not be excluded from the child care facility, but shall:

- 1) Cover and not touch their lesions;
- 2) Carefully observe handwashing policies;
- 3) Refrain from kissing or nuzzling infants or children, especially children with dermatitis.

RATIONALE: Adults are as capable of spreading infectious disease as children are. See also the Rationale for Child Inclusion/Exclusion/Dismissal, STANDARD 3.065.

COMMENTS: Other management procedures should be followed as stated in Child Inclusion/Exclusion/Dismissal, STANDARD 3.065. For additional information on infectious disease, see STANDARD 6.001 through STANDARD 6.039.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.008 PROTECTIVE MEASURES FOR MENINGOCOCCAL INFECTION

When an antibiotic to prevent an infection with *Neisseria meningitidis* (meningococcal infection) is indicated for child care contacts, all children and staff members, for whom prophylaxis has been recommended, shall be excluded from attending the facility until these measures have begun. Any

exposed individual who develops a febrile illness (one accompanied by a fever) shall receive prompt medical evaluation.

New entry children shall not be enrolled in a child care facility in which a case of invasive *N. meningitidis* has been documented until 2 months has elapsed since the diagnosis was made.

RATIONALE: Children and staff exposed, by close contact for an extended period to the child first infected with meningococcal disease, are at risk for contracting invasive meningococcal disease (56). The attack rate of meningococcal disease for this population is more than 300 times higher than rates in the general population (57).

Because outbreaks may occur in child care settings, chemoprophylaxis with rifampin or ceftriaxone is indicated for exposed child care contacts. Children in child care who are exposed to a child or an adult with meningococcal infection should receive rifampin or ceftriaxone as soon as possible to prevent an infection, preferably within 24 hours of diagnosis of the primary case (57, 58). In contacts over 18 years of age, ciprofloxacin is effective. Rifampin and ciprofloxacin are not recommended for pregnant women.

COMMENTS: For additional information regarding meningococcal disease, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 6.011 EXCLUSION FOR PERTUSSIS

Children and staff members with characteristic symptoms (primarily cough) of pertussis shall be excluded from child care pending evaluation by a health care provider. The child or staff member may not return to the facility until:

- a) Five days after initiation of a 10-14 day course of erythromycin or other recommended antibiotic therapy;
- b) Three to four weeks after the onset of the cough;
- c) The medical condition allows.

RATIONALE: Even if outbreaks of pertussis in child care facilities have not been reported, children and staff who attend out-of-home child care occasionally contract pertussis. The spread of infection to contacts who are incompletely immunized can be reduced by treating the primary case and susceptible contacts with prophylactic antibiotics, usually erythromycin (59, 60).

COMMENTS: For additional information regarding pertussis, consult the *Red Book* from the American Academy of Pediatrics (AAP). Contact information for the AAP is located in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 8.01 I CONTENT AND DEVELOPMENT OF THE PLAN FOR CARE OF ILL CHILDREN AND CAREGIVERS

The facility's plan for the care of ill children and caregivers shall be developed in consultation with the facility's health consultant. See STANDARD 1.040 through STANDARD 1.044. This plan shall include:

- a) Policies and procedures for urgent and emergency care;
- b) Admission and inclusion/exclusion policies. Conditions that require that a child be excluded and sent home are specified in Child Inclusion/Exclusion/Dismissal, STANDARD 3.065 through STANDARD 3.068;
- c) A description of illnesses common to children in child care, their management, and precautions to address the needs and behavior of the ill child as well as to protect the health of other children and caregivers. See Infectious Diseases, STANDARD 6.001 through STANDARD 6.039;
- d) A procedure to obtain and maintain updated individual emergency care plans for children with special health care needs;
- e) A procedure for documenting the name of person affected, date and time of illness, a description of symptoms, the response of the caregiver to these symptoms, who was notified (such as a parent, legal guardian,

nurse, physician, health department), and the response;

- f) The standards described in Reporting Illness, STANDARD 3.087 and STANDARD 3.088; and Notification of Parents, STANDARD 3.084 and STANDARD 3.085.
- g) Medication Policy. See STANDARD 8.021.

All child care facilities shall have written policies for the care of ill children and caregivers.

RATIONALE: The policy for the management of ill children should be developed in consultation with health care providers to address current understanding of the technical issues of contagion and other health risks. In group care, the facility must address the well-being of all those affected by illness: the ill child, the staff, parents of the ill child, other children in the facility and their parents, and the community. Where compromises must be made, the priority of the policy should be to meet the needs of the ill child. The policy should address the circumstances under which separation of the ill child from the group is required; the circumstances under which the caregiver, parents, legal guardian, or other designated persons need to be informed; and the procedures to be followed in these cases. The policy should take into consideration:

- a) The physical facility;
- b) The number and the qualifications of the facility's personnel;
- c) The fact that children do become ill frequently and at unpredictable times;
- d) The fact that working parents often are not given leave for their children's illnesses (124).

Infectious diseases are a major concern of parents and caregivers. Since children, especially those in group settings, can be a reservoir for many infectious agents, and since caregivers come into close and frequent contact with children, caregivers are at risk for developing a wide variety of infectious diseases. Following the infection control standards will help protect both children and caregivers from communicable disease. Recording the occurrence of illness in a facility and the response to the illness characterizes and defines the frequency of the illness, suggests whether an outbreak has occurred, may suggest an effective intervention, and provides documentation for administrative purposes.

COMMENTS: Facilities may comply by adopting a model policy and using reference materials as authoritative resources. The *Model Child Care Health Policies*, the print or internet version available from NAEYC and the AAP, may be helpful; or see the *Red*

Book or Preparing for Illness, a booklet which translates the recommendations of the *Red Book* for child care providers, available from the AAP. Check for other materials provided by the licensing agency, resource and referral agency, or health department. Training for staff on management of illness can be facilitated by using *Part 6: Illness in Child Care*, of the video series developed to illustrate how to comply with the standards in *Caring for Children*. The video series is available from the AAP and NAEYC. See the sample symptom record in Appendix F. The sample symptom record is also provided in *Healthy Young Children* produced by the NAEYC. See also a sample document for permission for medical condition treatment in Appendix W. Contact information for the National Association for the Education of Young Children (NAEYC) and the American Academy of Pediatrics (AAP) can be found in Appendix BB.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

PROHIBITED BEHAVIORS

STANDARD 2.035 NO SMOKING IN VEHICLES

There shall be no smoking in the vehicles used by the facility at any time.

In each vehicle from a center, a "NO SMOKING" sign shall be posted.

RATIONALE: Children in confined spaces, e.g., closed vehicles, should not be exposed to secondhand smoke, particularly children with respiratory problems. Exposure to smoke and smoke fumes could trigger increased respiratory difficulties.

COMMENTS: Compliance can be measured by interviewing drivers and inspecting vehicles for evidence of smoking.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 2.042 PROHIBITED CAREGIVER BEHAVIORS

The following behaviors shall be prohibited in all child care settings and by all caregivers:

- a) Corporal punishment, including beating, hitting, spanking, shaking, pinching, excessive exercise, exposure to extreme temperatures, and other measures producing physical pain;
- b) Withdrawal or the threat of withdrawal of food, or forcing of food, rest, or bathroom opportunities;
- c) Abusive or profane language or verbal abuse, threats, or derogatory remarks about the child or child's family;
- d) Any form of public or private humiliation, including threats of physical punishment;
- e) Any form of emotional abuse, including rejecting, terrorizing, ignoring, isolating, or corrupting a child;
- f) Binding or tying to restrict movement, such as in a car seat (except when travelling); or enclosing in a confined space such as a closet, locked room, box, or similar cubicle.

RATIONALE: Corporal punishment may be physical abuse or may easily become abusive. Emotional abuse can be extremely harmful to children, but, unlike physical or sexual abuse, it is not adequately defined in most state child abuse reporting laws. Corporal punishment is clearly prohibited in small family child care homes and centers in the majority of states (14-16). Research links corporal punishment with negative effects such as later criminal behavior and impairment of learning (17-21).

Factors supporting prohibition of certain methods of punishment include current child development theory and practice, legal aspects (namely, that a caregiver does not foster a relationship with the child in place of the parents), and increasing liability suits. The American Academy of Pediatrics (AAP) is opposed to the use of corporal punishment (13). Physicians, educators, and caregivers should neither inflict nor sanction corporal punishment (20).

COMMENTS: Appropriate alternatives to corporal punishment vary as children grow and develop. As infants become more mobile, the caregiver must

create a safe space and impose limitations by encouraging activities that distract them from harmful situations. Brief verbal expressions of disapproval help prepare infants and toddlers for later use of reasoning. However, the caregiver cannot expect infants and toddlers to be controlled by verbal reprimands. Preschoolers have begun to develop an understanding of rules and can be expected to understand "time out" (out-of-group activity) under adult supervision as a consequence for undesirable behavior. School-age children begin to develop a sense of personal responsibility and self-control and will recognize the removal of privileges (such as loss of participation in an activity) (13).

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 3.041 TOBACCO USE AND PROHIBITED SUBSTANCES

Tobacco use, alcohol, and illegal drugs shall be prohibited on the premises of the facility at all times.

RATIONALE: Scientific evidence has linked respiratory health risks to secondhand smoke. No children, especially those with respiratory problems, should be exposed to additional risk from the air they breathe. Infants and young children exposed to secondhand smoke are at risk of developing bronchitis, pneumonia, and middle ear infections when they experience common respiratory infections (30-33). Separation of smokers and nonsmokers within the same air space does not eliminate or minimize exposure of nonsmokers to secondhand smoke.

Cigarettes used by adults are the leading cause of ignition of fatal house fires (34-36).

COMMENTS: The age, defenselessness, and lack of discretion of the children under care make this prohibition an absolute requirement.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 8.038 POLICIES PROHIBITING SMOKING, TOBACCO, ALCOHOL, ILLEGAL DRUGS, AND TOXIC SUBSTANCES

Facilities shall have written policies specifying that smoking, use of chewing tobacco, use of alcohol, use or possession of illegal drugs, over-use or inappropriate use of prescribed drugs, or unauthorized potentially toxic substances are prohibited in the facility at all times (including outdoor play areas) and during all times when caregivers are responsible for the supervision of children, including times when children are transported and during field trips. The facility shall provide information to employees about available drug, alcohol, and tobacco counseling and rehabilitation and employee assistance programs.

RATIONALE: The age, defenselessness, and lack of discretion of the child under care make this prohibition an absolute requirement. The hazards of second-hand smoke warrant the prohibition of smoking in proximity of child care areas at any time. Residual toxins from smoking at times when the children are not using the space can trigger asthma and allergies when the children do use the space.

Smoking in outdoor areas when children are not present is acceptable. The use of alcoholic beverages in family homes while children are not in care is also permissible.

COMMENTS: The policies related to smoking and use of prohibited substances should be discussed via handouts or pamphlets that are given to parents, especially those who have children in small family child care homes or school-age child care facilities, and staff, to inform them of the dangers of these prohibited substances and of services to prevent their use. For family child care home providers who smoke, provisions will need to be made to assure that children are not left unsupervised while the caregiver smokes. In addition, it is strongly urged that, whenever possible, the caregivers be non-tobacco users because of the role model effect of tobacco users on children.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

PERSONNEL POLICIES AND RECORDS

STANDARD 8.044 WRITTEN PERSONNEL POLICIES

The facility shall have and implement written personnel policies. All written policies shall be reviewed and signed by the employee affected by them upon hiring and annually thereafter. Small family child care home providers shall develop policies for themselves, which are reviewed and revised annually. These policies shall address the following items:

- a) A wage scale with merit increases;
- b) Scheduled increases of small family child care home fees;
- c) Sick leave;
- d) Vacation leave;
- e) Family, parental, medical leave;
- f) Personal leave;
- g) Educational benefits;
- h) Health insurance and coverage for occupational health services;
- i) Social security or other retirement plan;
- j) Holidays;
- k) Workers' compensation or a disability plan as required by the number of staff;
- l) Minimally, breaks totaling 30 minutes within an 8-hour period of work, or as required by state labor laws;
- m) Maternity benefits;
- n) Overtime/compensatory time policy;
- o) Grievance procedures;
- p) Probation period;
- q) Grounds for termination;
- r) Training of new caregivers and substitute staff. See Training, STANDARD 1.023 through STANDARD 1.034; and Substitutes, STANDARD 1.037 through STANDARD 1.039;
- s) Personal/bereavement leave;
- t) Disciplinary action;
- u) Periodic review of performance. See Performance Evaluation, STANDARD 1.051 through STANDARD 1.057;
- v) Exclusion policies pertaining to staff illness. See Staff Exclusion, STANDARD 3.069;
- w) Staff health appraisal. See STANDARD 1.045 and STANDARD 1.046;
- x) Professional development leave.

Centers and large family child care homes shall have written policies that address all of these items. Small family child care homes shall have written policies that address items f, j, l, m, o, p, s, v.

RATIONALE: Written personnel policies provide a means of staff orientation and evaluation essential to the operation of any organization. Caregivers who are responsible for compliance with policies must have reviewed them.

The quality and continuity of the caregiving workforce is the main determiner of the quality of care. Nurturing the nurturers is essential to prevent burnout and promote retention. Fair labor practices should apply to child care as well as other work settings. Child care workers should be considered as worthy of benefits as workers in other career areas.

Medical coverage should include the cost of the health appraisals and immunizations required of child care workers, and care for the increased incidence of communicable disease and stress-related conditions in this work setting.

Sick leave is important to minimize the spread of communicable diseases and maintain the health of staff members. Sick leave may promote recovery from illness and thereby decreases the further spread or recurrence of illness.

Other benefits contribute to higher morale and less staff turnover, thus promoting quality child care. Lack of benefits is a major reason reported for high turnover of child care staff (116).

The potential for acquiring injuries and infections when caring for young children is a health and safety risk for child care workers. Information abounds about the incidence of infectious disease for children in child care settings. Staff members come into close and frequent contact with children and their excretions and secretions and are vulnerable to these illnesses as well, as children are reservoirs for many infectious agents. In addition, many child care workers are women who are planning a pregnancy or who are pregnant, and they may be vulnerable to the potentially serious effects of infection on the outcome of pregnancy.

COMMENTS: Staff benefits may be appropriately addressed in center personnel policies and in state and federal labor standards. Not all the material in such policies is necessarily appropriate for state child care licensing requirements.

Although the business plan of the caregiver will determine the scope of benefits the caregiver can offer, this standard outlines the types of benefits that must be considered to control staff turnover and reduce stress, which decreases caregiver performance. Some benefits may be beyond the reach of a small family child care home provider's capability.

The Center for the Child Care Workforce (CCW) has developed model work standards for both center-based staff and family child care home providers with specific recommendations for these elements of personnel policies. Model Work Standards serve as a tool to help programs assess the quality of the work environment and set goals to make improvements. For more information, contact the CCW. Contact information is located in Appendix BB.

A policy of encouraging sick leave, even without pay, or of permitting a flexible schedule will allow the caregiver to take time off when needed for illness. An acknowledgment that the facility does not provide paid leave but does give time off will begin to address workers' rights to these benefits and improve quality of care. There may be other nontraditional ways to achieve these benefits.

The subsidy costs of staff benefits will need to be addressed for child care to be affordable to parents.

Staff benefits may be appropriately addressed in center personnel policies and in state and federal labor standards. Not all the material that has to be addressed in these policies is appropriate for state child care licensing requirements. Having facilities acknowledge which benefits they do provide will help to enhance the general awareness of staff benefits among child care workers and other concerned parties. Currently, this standard is difficult for many facilities to achieve, but new federal programs and shared access to small business benefit packages will help. Many options are available for providing leave benefits and education reimbursements, ranging from partial to full employer contribution, based on time employed with the facility.

Providers should be encouraged to have health insurance. Health benefits can include full coverage, partial coverage (at least 75% employer paid), or

merely access to group rates. Some local or state child care associations offer reduced group rates for health insurance for child care facilities and individual providers.

For more information, see *Creating Better Child Care Jobs: Model Work Standards for Teaching Staff of Center-Based Child Care* and *Creating Better Family Child Care Jobs: Model Work Standards* from the Center for the Child Care Workforce (CCW). Contact information for the CCW is located in Appendix BB.

TYPE OF FACILITY: *Centers; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 8.058 MAINTENANCE AND CONTENT OF STAFF RECORDS

Individual files for all staff members and volunteers, shall be maintained in a central location within the facility and shall contain the following:

- a) The individual's name, birth date, address, and telephone number;
- b) The position application, which includes a record of work experience and work references; verification of reference information, education, and training; and records of any checking for driving records, criminal records and/or listing in child abuse registry. See Individual Licensure/Certification, STANDARD I.006, and Training, STANDARD I.023 through STANDARD I.039;
- c) The health assessment record, a copy of which, having been dated and signed by the employee's health care provider, shall be kept in a confidential file in the facility. This record shall be updated by another health appraisal when recommended by the staff member's health care provider or supervisory or regulatory/certifying personnel (115). See Staff Health Appraisals, STANDARD I.045 and STANDARD I.046;
- d) The name and telephone number of the person, physician, or health facility to be notified in case of emergency;
- e) The job description or the job expectations for staff and substitutes. See General

- Qualifications for All Caregivers, STANDARD 1.007 through STANDARD 1.013;
- f) Required licenses, certificates, and transcripts. See Individual Licensure/Certification, STANDARD 1.006;
- g) The date of employment or volunteer assignment;
- h) A signed statement of agreement that the employee understands and will abide by the following:
 - 1) Regulations and statutes governing child care;
 - 2) Personnel policies and procedures. See Personnel Policies, STANDARD 8.044;
 - 3) Health Policies and Procedures. See Management and Health Policies and Statement of Services, STANDARD 8.004 and STANDARD 8.005;
 - 4) Discipline policy. See Discipline Policy, STANDARD 8.008 through STANDARD 8.010; and Discipline, STANDARD 2.039 through STANDARD 2.043;
 - 5) Guidelines for reporting suspected child abuse, neglect, and sexual abuse;
 - 6) Confidentiality policy. See STANDARD 8.054.
- i) The date and content of staff and volunteer orientation(s);
- j) A daily record of hours worked, including paid planning time and parent conference time;
- k) A record of continuing education for each staff member and volunteer. See Continuing Education, STANDARD 1.029 through STANDARD 1.033;
- l) Written performance evaluations. See Performance Evaluation, STANDARD 1.051 through STANDARD 1.057.

RATIONALE: Complete identification of staff, paid or volunteer, is an essential step in safeguarding children in child care. Maintaining complete records on each staff person employed at the facility is a sound administrative practice. Employment history, a daily record of days worked, performance evaluations, a record of benefits, and whom to notify in case of emergency provide important information for the employer. Licensors will check the records to assure that applicable licensing requirements are met (such as identifying information, educational qualifications, health assessment on file, record of continuing education, signed statement of agreement to observe the discipline policy, and guidelines for reporting suspected child abuse, neglect, and sexual abuse).

Emergency contact information for staff, paid or volunteer, is needed in child care in the event that an adult becomes ill or injured at the facility.

The signature of the employee confirms the employee's notification of responsibilities that might otherwise be overlooked by the employee.

TYPE OF FACILITY: *Center; Large Family Child Care Home*

STANDARD 8.061 RECORDS OF ILLNESS

In situations where illnesses are reported by a parent or become evident while a child or staff member is at the facility and may potentially require exclusion, the facility shall record the following:

- a) Date and time of the illness;
- b) Person affected;
- c) Description of the symptoms;
- d) Response of the staff to these symptoms;
- e) Persons notified (such as a parent, legal guardian, nurse, physician, or the local health department representative, if applicable), and their response;
- f) Name of person completing the form.

RATIONALE: Recording the occurrence of illness in a facility and the response to the illness characterizes and defines the frequency of the illness, suggests whether an outbreak has occurred, may suggest an effective intervention, and provides documentation for administrative purposes.

COMMENTS: Surveillance for symptoms can be accomplished easily by using a combined attendance and symptom record. Any symptoms can be noted when the child is signed in, with added notations made during the day when additional symptoms appear. Simple forms, for a weekly or monthly period, that record data for the entire group help caregivers spot patterns of illness for an individual child or among the children in the group or center.

For a sample enrollment/attendance/symptom record, see Appendix F. For a sample *Incident Report Form*, see Appendix Y. Multicopy forms can be used to make copies of an injury report simultaneously for the

child's record, for the parent, for the folder that logs all injuries at the facility, and for the regulatory agency. Facilities should secure the parent's signature on the form at the time it is presented to the parent. For information on the inclusion/exclusion/dismissal of children from child care, see STANDARD 3.065 through STANDARD 3.068.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

STANDARD 8.062 RECORDS OF INJURY

When an injury occurs in the facility that requires first aid or medical attention for a child or adult, the facility shall complete a report form that provides the following information:

- a) Name, sex, and age of the injured person;
- b) Date and time of injury;
- c) Location where injury took place;
- d) Description of how the injury occurred, including who (name, address and phone number) saw the incident and what they reported, as well as what was reported by the child;
- e) Body part(s) involved;
- f) Description of any consumer product involved;
- g) Name and location of the staff member responsible for supervising the child at the time of the injury;
- h) Actions taken on behalf of the injured following the injury;
- i) Recommendations of preventive strategies that could be taken to avoid future occurrences of this type of injury;
- j) Name of person who completed the report;
- k) Name and address of the facility.

Three copies of the injury report form shall be completed. One copy shall be given to the child's parent or legal guardian (or to the injured adult). The second copy shall be kept in the child's (or adult's) folder at the facility, and the third copy shall be kept in a chronologically filed injury log that is periodically reviewed for patterns of injury. This last copy shall be kept in the facility for the period required by the state's statute of limitations.

RATIONALE: Injury patterns and child abuse can be discerned from such records and can be used to prevent future problems (117). A report form is also necessary for providing information to the child's parents and health care provider and other appropriate health agencies.

COMMENTS: For a sample *Incident Report Form*, see Appendix Y. Multicopy forms can be used to make copies of an injury report simultaneously for the child's record, for the parent, for the folder that logs all injuries at the facility, and for the regulatory agency. Facilities should secure the parent's signature on the form at the time it is presented to the parent. For additional information on the review of injury and illness logs, see STANDARD 8.064. For a sample *Incident Report Form*, see Appendix Y.

TYPE OF FACILITY: *Center; Large Family Child Care Home; Small Family Child Care Home*

REFERENCES

1. Roupp R, Travers J, Glantz R, et al. *Children at the Center: Final Report of the National Day Care Study*. Vol 1. Cambridge, Mass: Abt Associates; 1979.
2. National Association for the Education of Young Children (NAEYC). *Accreditation and Criteria Procedures of the National Academy of Early Childhood Programs*. Washington, DC: NAEYC; 1998.
3. American Academy of Pediatrics. Drowning in infants, children and adolescents. *Pediatrics*. 1993;92:292-4.
4. Whitebrook M, Howes C, Phillips D. *Worthy Work, Unlivable Wages: The National Child Care Staffing Study, 1988-1997*. Washington, DC: Center for the Child Care Workforce; 1998.
5. Hale CM, Polder JA. *The ABC's of Safe and Healthy Child Care: A Handbook for Child Care Providers*. Atlanta, Ga: Centers for Disease Control and Prevention; 1997.
6. Gun W, Pinsky P, Sacks J, et al. Injury and poisoning in out-of-home child care and home care. *Amer J Dis Child*. 1991;779-81.
7. Holmes SJ, Morrow AL, Pickering LK. Child care practices and effects of social change on the epidemiology of infectious diseases and antibiotic resistance. *Epidemiol Rev*. 1996;18:100-28.
8. Crowley AA. Health services in child care day care centers: a survey. *J Pediatr Health Care*. 1990;4(5):252-9.
9. Crowley AA. Child care health consultation: the Connecticut experience. *Matern Child Health J*. 2000;4(1):67-75.
10. Gratz RR, Claffey A. Adult health in child care: health status, behaviors and concerns of teachers, directors and family care providers. *Early Child Res Q*. 1996;11:243-267.
11. Wheelock College, The Family Child Care Accreditation Project. *Quality Standards for the National Association of Family Child Care (NAFCC) Accreditation*. Des Moines, Iowa: NAFCC; 1999.
12. Gratz R, Boulton P. Health considerations for pregnant child care staff. *J Pediatr Health Care*. 1994;8:18-26.
13. American Academy of Pediatrics (AAP). Guidance for effective discipline. *Pediatrics*. 1998;101:723-728.
14. The Children's Foundation. *Family Child Care Licensing Study, 2000*. Washington, DC: Author; 2000.
15. Azer S, Eldred D. *Training Requirements in Child Care Licensing Regulations*. Boston, Mass: Center for Career Development in Early Care and Education, Wheelock College; 1998.
16. Meadows A, ed. *Caring for America's Children*. Washington, DC: National Academy of Sciences & National Research Council; 1991.
17. Straus MA, et al. Spanking by parents and subsequent antisocial behavior of children. *Arch Pediatr Adolesc Med*. 1997;151:761-67.
18. Deater-Deckard K, et al. Physical discipline among African American and European American mothers: links to children's externalizing behaviors. *Dev Psychol*. 1996;32(6):1065-72.
19. Weiss B, et al. Some consequences of early harsh discipline: child aggression and a maladaptive social information processing style. *Child Dev*. 1992;63(6):1321-35.
20. American Academy of Pediatrics. The short and long-term consequences of corporal punishment. *Pediatrics*. 1996;98(4 Pt 2):803-860.
21. American Academy of Pediatrics. Policy Statement: *Corporal Punishment in Schools (RE9207)*. *Pediatrics*. 1991; 88:173.
22. American Academy of Pediatrics. *Pediatric Nutrition Handbook*. 4th ed. Elk Grove, Ill: American Academy of Pediatrics; 1998.
23. American Academy of Pediatrics, Committee on Infectious Disease. Recommended childhood immunization schedule - United States, January - December 2001. *Pediatrics*. 2001;107:202-204.

24. Advisory Committee on Immunization Practices (ACIP). Immunization of health-care workers. *Mor Mortal Wkly Rev CDC Surveill Summ.* 1997;46(RR18).
25. Van R, Morrow AL, Reves RR, et al. Environmental contamination in child day care centers. *Am J Epidemiol.* 1991;133:460-470.
26. Rutala WA, Weber DJ. Uses of inorganic hypochlorite (bleach) in health-care facilities. *Clin Microbiol.* 1997;10:597-610.
27. Weber DJ, Barbee SL, Sobsey MD, Rutala WA. The effect of blood on the antiviral activity of sodium hypochlorite, a phenolic, and a quaternary ammonium compound. *Infect Control and Hosp Epidemiol.* 1999;20:821-827.
28. Black RE, Dykes AC, Anderson KE. Handwashing to prevent diarrhea in day care centers. *Am J Epidemiol.* 1981;113:445-451.
29. Van de Perre P, Simonon A, Hitimana, et al. Infective and anti-infective properties of breastmilk from HIV-1-infected women. *Lancet.* 1993;341(8850):914-8.
30. Schwartz J, Timonen KL, Pekkanen J. Respiratory effects of environmental tobacco smoke in a panel study of asthmatic and symptomatic children. *Am J Resp Crit Care Med.* 2000;161:802-6.
31. Stenstrom R, Bernard PA, Ben-Simhon H. Exposure to environmental tobacco smoke as a risk factor for recurrent acute otitis media in children under the age of five years. *Inter J Pediatr Otorhinolaryngol.* 1993;27(2):127-36.
32. Pershagen G. Accumulating evidence on health hazards of passive smoking. *Acta Paediatr.* 1999;88(5):490-2.
33. Gergen PJ, Fowler JA, Maurer KR, et al. The burden of environmental tobacco smoke exposure on the respiratory health of children 2 months through 5 years of age in the United States: third national health and nutritional examination survey, 1988 to 1994. *Pediatrics.* 1998;101(2):E8.
34. Runyan CW, Bangdiwala SI, Linzer MA, et al. Risk factors for fatal residential fires. *N Eng J Med.* 1992;327:856-63.
35. Brigham PA, Mcguire A. Progress towards a fire-safe cigarette. *J Public Health Policy.* 1995;16(4):433-9.
36. Ballard JE, Koepsell TD, Rivara F. Association of smoking and alcohol drinking with residential fire injuries. *Am J Epidemiol.* 1992;135:26-34.
37. Reves RR, Pickering LK. Impact of child day care on infectious diseases in adults. *Infect Dis Clin North Amer.* 1992;6:239-50.
38. Brown MZ, Gerberich, SG. Disabling injuries to childcare workers in Minnesota, 1985 to 1990. An analysis of potential risk factors. *J Occup Med.* 1993;35(12):1236-43.
39. Grantz RR, Claffey A. Adult health in child care: health status, behaviors, and concerns of teachers, directors, and family child care providers. *Early Child Res Q.* 1996;22(2):243-67.
40. *What You Need to Know About the Safety of Art and Craft Materials.* Hanson, Mass: Art and Creative Materials Institute; 2000.
41. *Handbook of Common Poisonings in Children.* 3rd ed. Elk Grove Village, Ill: American Academy of Pediatrics; 1995.
42. American Academy of Pediatrics Committee on Environmental Health. Screening for elevated blood lead levels. *Pediatrics.* 1998;101(6):1072-1078.
43. US Consumer Product Safety Commission (CPSC); *CPSC Finds Lead Poisoning Hazard for Young Children in Imported Vinyl Miniblinds.* Washington, DC: CPSC; 1996:96-150. Available at: <http://www.cpsc.gov/cpscpub/prerel/prhtml96/96150.html>. Accessed November 29, 2000.
44. American Academy of Pediatrics, Committee on Infectious Disease. Recommended childhood immunization schedule - United States, January - December 2001. *Pediatrics.* 2001;107:202-204.

45. Adams WG, Deaver KA, Cochi SL, et al. Decline of childhood *Haemophilus influenzae* type b (Hib) disease in the Hib vaccine era. *JAMA*. 1993;269:246.
46. Murphy TV, White KE, Pastor P, et al. Declining incidence of *Haemophilus influenzae* type b disease since introduction of vaccination. *JAMA*. 1993;269:246.
47. Osterholm MT, Pierson LM, White KE, et al. The risk of a subsequent transmission of *Haemophilus influenzae* type b disease among children in day care. *N Engl J Med*. 1987;316:1-5.
48. Murphy TV, Clements JF, Breedlove JA, et al. Risk of subsequent disease among day-care contacts of patients with systemic *Haemophilus influenzae* type b disease. *N Engl J Med*. 1987; 316:5 - 10.
49. Makintubee S, Istre GR, Ward JI. Transmission of invasive *Haemophilus influenzae* type b disease in day care settings. *J Pediatr*. 1987;111:180-186.
50. Fleming DW, Leibenhaut MH, Albanes D, et al. Secondary *Haemophilus influenzae* type b in day care facilities: risk factors and prevention. *JAMA*. 1985;254:509-514.
51. Pickering LK, Osterholm M. Infectious diseases associated with out-of-home child care. In: Long SS, Pickering LK, Prober CG, eds. *Principles and Practice of Pediatric Infectious Diseases*. Kent, United Kingdom: Churchill-Livingstone; 1997:31-39.
52. American Academy of Pediatrics, Committee on Infectious Diseases. Prevention of pneumococcal infections including the use of pneumococcal conjugate and polysaccharide vaccines and antibiotic prophylaxis. *Pediatrics*. In press.
53. Centers for Disease Control and Prevention (CDC). Prevention of Pneumococcal Disease Among Infants and Young Children Using the Pneumococcal Conjugate Vaccine: Report to the Advisory Committee on Immunization Practice. Atlanta, Ga: CDC; In press.
54. Levine OS, Farley M, Harrison LK, et al. Risk factors for invasive pneumococcal disease in children: a population-based case control study in North America. *Pediatrics*. 1999;103.
55. Rauch AM, O’Ryan M, Van R, et al. Invasive disease due to multiply resistant *Streptococcus pneumoniae* in Houston, Texas day-care centers. *Am J Dis Child*. 1990;144:933-27.
56. Van Deuren M, Brandtzaeg P, van der Meer JWM. Update on meningococcal disease with emphasis on pathogenesis and clinical management. *Clin Microbiol Rev*. 2000;13:144-66.
57. American Academy of Pediatrics, Committee on Infectious Diseases. Meningococcal disease prevention and control strategies for practice-based physicians. *Pediatrics*. 1996;97:404-11.
58. Centers for Disease Control and Prevention. Prevention and control of meningococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). *Mor Mortal Wkly Rev CDC Surveill Summ*. 2000;49(RR-07):1-10.
59. American Academy of Pediatrics, Committee on Infectious Diseases. Acellular pertussis vaccine: recommendations for use as the initial series in infants and children. *Pediatrics*. 1997;99:282-8..
60. Centers for Disease Control and Prevention. Pertussis vaccination: use of acellular pertussis vaccines among infants and young children: recommendations of the Advisory Committee on Immunization Practices(ACIP). *Mor Mortal Wkly Rev CDC Surveill Summ*. 1997;46:1-25.
61. Smith TD, Wilkinson V, Kaplan EL. Group A streptococcus-associated upper respiratory tract infections in a day-care center. *Pediatrics*. 1989;83:380-384.
62. Falck G, Kjellander J. Outbreak of group A streptococcal infection in a day-care center. *Pediatr Infect Dis J*. 1992;11:914-9.
63. American Academy of Pediatrics, Committee on Infectious Diseases. Severe invasive group A streptococcal infections: subject review. *Pediatrics*. 1998;101-136-40.

64. Leggiadro RT, Callery B, Dowdy S, et al. An outbreak of tuberculosis in a family day care home. *Pediatr Infect Dis J.* 1989;8:52-4.
65. Torok TJ. Parovirus B19 and human disease. *Adv Intern Med.* 1992;37:431-55.
66. Churchill RB, Pickering LK. Infection control challenges in child care centers. *Infect Dis Clin N Am.* 1997;11:347-65.
67. Louhiala PJ, Jaakola N, Ruotsalainen R, et al. Form of day care and respiratory infections among Finnish children. *Am J Public Health.* 1995;85:1109-12.
68. Nafstad P, Hagen JA, Oie L, et al. Day care centers and respiratory health. *Pediatrics.* 1999;103:753-58.
69. Alho OP, Laara E, Oja H. Public health impact of various risk factors for acute otitis media in Northern Finland. *Am J Epidemiol.* 1996;143:1149-56.
70. Fleming DW, Cochi SL, Hightower AW, Broome CV. Childhood upper respiratory tract infections: to what degree is incidence affected by day-care attendance? *Pediatrics.* 1987;79:55-60.
71. Roberts L, Smith W, Jorm L, et al. Effect of infection control measures on the frequency of upper respiratory infection in child care: a randomized controlled trial. *Pediatrics.* 2000;105:738-42.
72. Homes SJ, Morrow AL, Pickering LK. Child care practices: effects of social changes on epidemiology of infectious diseases and antibiotic resistance. *Epidemiol Rev.* 1996;18:10-28.
73. Dowell SF, Schwartz B, Phillips WR, et al. Principles of judicious use of antimicrobial agents for pediatric upper respiratory tract infections. *Pediatrics.* 1998;101(S):163.
74. Prober CG. Herpes simplex virus. In: SS Long, LK Pickering, CG Prober, eds. *Principles and Practice of Pediatric Infectious Diseases.* Kent, United Kingdom: Churchill Livingstone; 1997:1134-44.
75. Schmitt DL, Johnson DW, Henderson FW. Herpes simplex type I infections in group care. *Pediatr Infect Dis J.* 1991;10:729-34.
76. Centers for Disease Control and Prevention. Prevention of varicella: update recommendations of the Advisory Committee on Immunization Practices (ACIP). *Mor Mortal Wkly Rep CDC Surveill Summ.* 1999;48(RR-6):1-5.
77. American Academy of Pediatrics, Committee on Infectious Diseases. Varicella vaccine update. *Pediatrics.* 2000; 105:136-41.
78. American Academy of Pediatrics, Committee on Infectious Diseases. Recommendations for the use of live attenuated varicella vaccine. *Pediatrics.* 1995;95:791-96.
79. Pass RF. Cytomegalovirus. In: Long SS, Pickering LK, Prober CG, eds. *Principles and Practices of Pediatric Infectious Diseases.* Kent, United Kingdom: Churchill Livingstone; 1997:1154-65.
80. Pass RF, Hutto C. Group day care and cytomegaloviral infections of mothers and children. *Rev Infect Dis.* 1986;8:599-605.
81. Yeager AS. Transmission of cytomegalovirus to mothers by infected infants: another reason to prevent transfusion-acquired infections. *Pediatr Infect Dis.* 1983;2:295-297.
82. Pass RF, Hutto C, Ricks R, Cloud GA. Increased rate of cytomegalovirus infection among parents of children attending day care centers. *N Engl J Med.* 1986;314:1414-1418.
83. Adler SP. Molecular epidemiology of cytomegalovirus: evidence for viral transmission to parents from children infected at a day care center. *Pediatr Infect Dis.* 1986;5:315-318.
84. Pass RF, Hutto C, Cloud G. Day care workers and cytomegalovirus infection. *Clin Res.* 1988;36:65A.
85. Adler SP. Cytomegalovirus and child day care: evidence for increased infection rate among day care workers. *N Engl J Med.* 1989;321:1290-96.

86. Murph J, Baron JC, Brown K, et al. The occupational risk of cytomegalovirus infection among day-care providers. *JAMA*. 1991;265:603-608.
87. Centers for Disease Control and Prevention. Prevention of hepatitis A through active or passive immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP). *Mor Mortal Wkly Rep CDC Surveill Summ*. 1999;48(RR-12):1-37.
88. Pickering LK, Evans DG, Dupont HL, et al. Diarrhea caused by *Shigella*, rotavirus and *Giardia* in day care centers: prospective study. *J Pediatr*. 1981;99:51-56.
89. Barlett AV, Moore M, Gary GW, et al. Diarrheal illness among infants and toddlers in child day care centers. *J Pediatr*. 1985;107:495-502.
90. Hadler SC, Erben JJ, Francis DP, et al. Risk factors for hepatitis A in day care centers. *J Infect Dis*. 1982;145:255-261.
91. Hadler SC, Webster HM, Erben JJ, et al. Hepatitis A in day care centers: a community-wide assessment. *N Engl J Med*. 1980;302:1222-1227.
92. Pickering LK, Woodward WE, Dupont HL, et al. Occurrence of *Giardia lamblia* in children in day care centers. *J Pediatr*. 1984;104:522-526.
93. Pickering LK, Barlett AVE, Reves RR, Morrow A. Asymptomatic rotavirus before and after rotavirus diarrhea in children in day care centers. *J Pediatr*. 1988;112:361-365.
94. Sullivan P, Woodward WE, Pickering LK, et al. A longitudinal study of the occurrence of diarrheal disease in day care centers. *Am J Public Health*. 1984; 74:987-991.
95. Keswick BH, Pickering LK, Dupont HL, et al. Survival and detection of rotavirus on environmental surfaces in day care centers. *Appl Environ Microbiol*. 1983;46:813-816.
96. Weniger BG, Pattenber J, Goodman RA. Fecal coliforms on environmental surfaces in two day care centers. *Appl Environ Microbiol*. 1983;45:733-735.
97. Bartlett AV, Jarvis BA, Ross V, et al. Diarrheal illness among infants and toddlers in day care centers: effects of active surveillance and staff training without subsequent monitoring. *Am J Epidemiol*. 1988;127:808-817.
98. Roberts L, Jorm L, Patel M, et al. Effect of infection control measures on the frequency of diarrheal episodes in child care: a randomized, controlled trial. *Pediatrics*. 2000;105:743-46.
99. American Academy of Pediatrics, Committee on Infectious Diseases. Prevention of hepatitis A infections: guidelines for use of hepatitis A vaccine and immune globulin. *Pediatrics*. 1996;98:1207-15.
100. Aronson SS, Aiken LS. Compliance of child care programs with health and safety standards: impact of program evaluation and advocate training. *Pediatrics*. 1980;65:318-325.
101. Mitchell DK, Van R, Morrow AL, et al. Outbreaks of astrovirus gastroenteritis in day care centers. *J Pediatr*. 1993;123:725-32.
102. American Academy of Pediatrics, Committee on Pediatric AIDS and Committee on Infectious Disease. Issues related to human immunodeficiency virus transmission in schools, child care, medical settings, the home, and community. *Pediatrics*. 1999;104:318-24.
103. American Academy of Pediatrics, Committee on Infectious Diseases. Hepatitis C viral infection. *Pediatrics*. 1998;101:481
104. Centers for Disease Control and Prevention. Recommendations for prevention and control of hepatitis C virus (HCV) infection and HCV-related chronic disease. *Mor Mortal Wkly Rev CDC Surveill Summ*. 1998;47(RR-19):1-38.
105. Centers for Disease Control and Prevention. Hepatitis B virus infection: a comprehensive immunization strategy to eliminate transmission in the United States: recommendations of the Advisory

Committee on Immunization Practices. *Mor Mortal Wkly Rev CDC Surveill Summ*. In press.

106. Deseda DD, Shapiro CN, Carroll K. Hepatitis B virus transmission between a child and staff member at a day-care center. *Pediatr Infect Dis J*. 1994;13:828.

107. Tokars JL, Marcus R, Culver DH, et al. Surveillance of HIV infection and zidovudine use among healthcare workers after occupational exposure to HIV-infected blood: the Centers for Disease Control cooperative needle stick surveillance group. *Ann Intern Med*. 1993;118:913-9.

108. Shapiro CN, McCaig LF, Genesheimer KF, et al. Hepatitis B virus transmission between children in day care. *Pediatr Infect Dis J*. 1989;8(87):0-75.

109. Reves RR, Pickering LK. Impact of child day care on infectious diseases in adults. *Infect Dis Clin North Am*. 1992;6:239-50.

110. American Academy of Pediatrics, Committee on Infectious Diseases. Measles immunization in HIV infected children, 1999. *Pediatrics*. 1999;103:1057-60.

111. Centers for Disease Control and Prevention. 1999 USPHS/IDSA guidelines for the prevention of opportunistic infections in persons infected with human immunodeficiency virus. *Mor Mortal Wkly Rep CDC Surveill Summ*. 1999;48(RR-10):1-6.

112. American Academy of Pediatrics, Committee on Infectious Diseases. *Red book 2000: Report of the committee on infectious diseases*. Elk Grove Village, Ill: American Academy of Pediatrics; 2000.

113. Strauman-Raymond K, Lie L, Kempf-Berkseth J. Creating a safe environment for children in daycare. *J Sch Health*. 1993;63(6):254-257.

114. Solomons HC, Elardo R. Biting in day care centers: incidence, prevention, and intervention. *J Pediatr Health Care*. 1991;5:191-196.

115. Kendrick AS, Kaufman R, Messenger KP, eds. *Healthy Young Children: A Manual for Programs*. Washington, DC: National Association for the Education of Young Children; 1995.

116. Whitebook M, Bellm D. *Taking on Turnover: An Action Guide for Child Care Center Teachers and Directors*. Washington, DC: Center for the Child Care Work Force; 1999.

117. Deitch S, ed. *Health in Day Care: A Manual for Health Care Professionals*. Elk Grove Village, Ill: American Academy of Pediatrics; 1987.

118. National Institute of Child Health and Human Development (NICHD) Early Child Care Research Network. Characteristics of infant child care: factors contributing to positive caregiving. *Early Child Res Q*. 1996;11:269-306.

119. National Institute of Child Health and Human Development (NICHD) Early Child Care Research Network. Child Outcomes When Child Center Classes Meet Recommended Standards for Quality. *Am J Public Health*. 1999;89:1072-77.

120. Bredekamp S, Copple C, eds. *Developmentally Appropriate Practice in Early Childhood Programs*. Rev ed. Washington, DC: National Association for the Education of Young Children (NAEYC); 1997.

121. National Fire Protection Association (NFPA). *NFPA 101 Life Safety Code 2000 Edition*. Quincy, Mass: NFPA; 2000.

122. Deitch S, ed. *Health in Day Care: A Manual for Health Care Professionals*. Elk Grove Village, Ill: American Academy of Pediatrics; 1987.

123. National Research Council. *Who Care for America's Children? Child Care Policy in the 1990's*. Washington, DC: National Academy Press; 1990.

124. Pennsylvania Chapter, American Academy of Pediatrics. *Preparing for Illness: A Joint Responsibility for Parents and Caregivers*. 4th ed. [Brochure]. Washington, DC: National Association for the Education of Young Children, 1999.

125. Chang A, Lugg MM, Nebedum A. Injuries in preschool children enrolled in day care centers. *Pediatrics*. 1989;83:272-277.

126. Hawks D, Ascheim J, Giebink GS, Graville S, Solnit AJ. Science, prevention, and practice VII: improving child day care, a concurrent summary of the American Public Health Association/American Academy of Pediatrics national health and safety guidelines for child-care programs; featured standards and implementation. *Pediatrics*. 1994;95(6):1110-1112.

127. Soto JC, Guy M, Belanger L. Science, Prevention and practice II: preventing infectious diseases, abstracts on handwashing and infection control in day-care centers. *Pediatrics*. 1994;94(6):1030.

128. Roberts L, Mapp E, Smith W, Jorm L, Pate M, Douglas RM, McGilchrist C. Effect of infection control measures on the frequency of upper respiratory infection in child care: a randomized, controlled trial. *Pediatrics*. 2000;105(suppl 4, Pt 1):738-742.

129. Niffenegger JP. Proper handwashing promotes wellness in child care. *J Pediatr Health Care*. 1997;11:26-31.

130. Donowitz LG, ed. *Infection Control in the Child Care Center and Preschool*. 2nd ed. Baltimore, Md: Williams & Wilkins. 1996;18-19,68.

131. Palmer SR, Soulsby L, Simpson DIH, eds. *Zoonoses: Biology, Clinical Practice, and Public Health Control*. New York, NY: Oxford University Press; 1998.

132. Weinberg AN, Weber DJ, eds. Animal associated human infections. *Infect Dis Clin North Am*. 1991;5:1-175,649-731.

133. Crowley AA. Health services in child care day care centers: a survey. *J Pediatr Health Care*. 1990;4(5):252-9.

134. London F. Nurse in day care. *Adv Clin Care*. 1990;5(2):14-5.

135. American Red Cross. *Health and Safety Services: Child Care Course*. Available at: www.siteone.com/redcross/hscourses/fs3116.htm. Accessed November 26, 2000.

136. Thacker SB, Addiss DG, Goodman RA, et al. Infectious diseases and injuries in child day care: opportunities for healthier children. *JAMA*. 1993;269(21):2734-5.

Additional references for the reader on the topic of Child Care Providers' Health and Well Being (not in the original *Caring for Our Children, 2nd Edition*)

Bright K, Calabro K. Childcare workers and workplace hazards in the United States: Overview of research and implications for occupational health professionals. *Occupational Medicine*. 1999; 49(7): 427-437.

Calabro KS, Bright KA, Cole FL et al. Child care work: Organizational Culture and health and safety. *AAOHN Journal*. 2000; 48(10): 480-486.

Calder J, Gratz R, Shipp M. Occupational health and safety for child care workers. In *Occupational and environmental medicine secrets*. Philadelphia, PA: Belfus & Hanley, 1999.

Calton, KJ, Eisenstat SA & Ziporyn T. *The New Harvard Guide to Women's Health*. Cambridge, MA: Belknap Press, 2004.

Cordell RL. The risk of infectious diseases among child care providers. *J Am Med Womens Assoc*. 2001; 56(3):109-12.

Gratz R, Boulton P. Pregnant staff and parental leave: Policies and procedures. *Young Children*. 1995; 50(5): 79-83

Gratz RR, Claffey A. Today's research, tomorrow's practices: Highlights from Early Childhood Research Quarterly. Adult health in child care: Health status, behaviors, and concerns of teachers, directors, and family child care providers. *Young Children*. 1997; 52(2): 82-83.

Gratz R, Claffey A, King P, Scheuer G. The physical demands and ergonomics of working with young children. *Early Child Development and Care*. 2002; 172: 531-537.

King P, Gratz R, Scheuer G, Claffey A. The ergonomics of child care: Conducting worksite analyses. *WORK-A Journal of Prevention, Assessment & Rehabilitation*. 1996; 6: 25-32.

Kushnir T, Milbauer V. Managing stress and burnout at work: A cognitive group intervention program for directors of day care centers. *Pediatrics*. 1994; 94: 1074-1077.

Manlove E. Multiple correlates of burnout in childcare work. *Early Childhood Research Quarterly*. 1993; 8(1): 499-518.

Pickering LK, Reves RR. Occupational risks for child-care providers and Teachers. *JAMA*,. 1990; 263(15): 2096-2097.

Reves RR, Pickering LK. Impact of child day care on infectious diseases in adults. *Infectious Disease Clinics of North America*. 1992; 6(1):239-250.

Robinson J. Infectious diseases in schools and child care facilities. *Pediatr Rev*. 2001; 22(2):39-46.

Major Occupational Health Hazards

Infectious Diseases and Organisms

General Types of Infectious Diseases

Diarrhea (infectious)
Respiratory tract infection

Specific Infectious Diseases and Organisms

Adenovirus
Astrovirus
Caliciviruses
Campylobacter jejuni/coli
Chickenpox (varicella)
Clostridium parvum
Cytomegalovirus (CMV)
Escherichia coli O157:H7
Giardia lamblia
Hepatitis A
Hepatitis B
Hepatitis C
Herpes 6
Herpes 7
Herpes simplex
Herpes zoster
Human Immunodeficiency Virus (HIV)
Impetigo
Influenza
Lice
Measles
Meningitis (bacterial, viral)
Meningococcus (Neisseria meningitidis)
Mumps
Parvovirus B19
Pertussis
Pinworm
Ringworm
Rotavirus
Rubella
Salmonella organisms
Scabies
Shigella organisms
Staphylococcus aureus
Streptococcus, Group A
Tuberculosis

Injuries and Noninfectious Diseases

Back injuries
Bites
Dermatitis
Falls

Environmental exposure

Art materials
Cleaning, sanitizing and disinfecting solutions
Indoor air pollution
Noise
Odor

Stress

Fear of liability
Inadequate break time, sick time, and personal days
Inadequate facilities
Inadequate pay
Inadequate recognition
Inadequate training
Insufficient professional recognition
Lack of adequate medical/dental health insurance
Responsibility for children's welfare
Undervaluing of work
Working alone

Gloving



Put on a clean pair of gloves.

Provide the appropriate care.

Remove each glove carefully. Grab the first glove at the palm and strip the glove off. Touch dirty surfaces only to dirty surfaces.

Ball-up the dirty glove in the palm of the other gloved hand.

With the clean hand strip the glove off from underneath at the wrist, turning the glove inside out. Touch dirty surfaces only to dirty surfaces.

Discard the dirty gloves immediately in a step can. Wash your hands.

Contact Information

American Academy of Pediatrics (AAP)

141 Northwest Point Boulevard
Elk Grove Village, IL 60007-1098
Phone: 847-434-4000
Fax: 847-228-5097
<http://www.aap.org>

American Association for Health Education (AAHE)

1900 Association Drive
Reston, VA 20191-1599
Phone: 1-800-213-7193 or 703-476-3437
Fax: 703-476-6638
E-mail: aahe@ahhperd.org
<http://www.aahperd.org/aahe>

American Heart Association (AHA)

7272 Greenville Avenue
Dallas, Texas 75231
Phone: 214-373-6300
<http://www.amhrt.org>

American Public Health Association (APHA)

800 I Street N.W.
Washington, DC 20001-3710
Phone: 202-777-APHA(2742)
Fax: 202-777-2534
<http://www.apha.org>
E-mail: comments@apha.org

American Society for Testing and Materials (ASTM)

100 Barr Harbor Drive
West Conshohocken, PA 19428-2959
Phone: 610-832-9500
Fax: 610-832-9555
<http://www.astm.org>

Art and Creative Materials Institute (ACMI)

1280 Main St.
PO Box 479
Hanson, MA 02341
Phone: 781-293-4100
Fax: 781-294-0808
<http://www.acminet.org>

Center for the Child Care Workforce (CCW)

733 15th Street, NW Suite 1037
Washington, DC 20005-2112
Phone: 1-800-879-6784
Fax: 202-737-0370
E-mail: ccw@ccw.org
<http://www.ccw.org>

Centers for Disease Control and Prevention (CDC)

1600 Clifton Road NE
Atlanta, GA 30333
1-800-311-3534
<http://www.cdc.gov>

Consumer Product Safety Commission, US (CPSC)

1-800-638-2772
<http://www.cpsc.gov>

Environmental Protection Agency (EPA)

401 M Street SW
Washington, DC 20460-0003
Phone: 202-260-2090
<http://www.epa.gov>

The Healthy Child Care America Campaign

American Academy of Pediatrics
141 N.W. Point Blvd.
Elk Grove Village, IL 60007
Phone: 888-227-5409
Fax: 847-228-6432
E-mail: childcare@aap.org

Maternal and Child Health Bureau (MCHB)

MCHB Region I

Room 1826
John F. Kennedy Federal Building
Boston MA 02203
Phone: 617-565-1433
Fax: 617-565-3044
States - CT, ME, MA, NH, RI, VT

MCHB Region II

26 Federal Plaza
Federal Building, Room 3835
New York, N.Y. 10278
Phone: 212-264-2571
Fax: 212-264-2673
States - NJ, NY, PR, VI

MCHB Region III

Health Resources, Northeast Cluster
Public Ledger Building
150 S. Independence Mall West
Suite 1172
Philadelphia, PA 19106-3499
Phone: 215-861-4422
Fax: 215-861-4385
States - DE, DC, MD, PA, VA, WV

Contact Information**MCHB Region IV**

HRSA Field Coordinator, Southeast Cluster
Atlanta Federal Center
61 Forsyth Street, S.W., Suite 3M60
Atlanta, GA 30303-8909
Phone: 404-562-7980
Fax: 404-562-7974
States - AL, FL, GA, KY, MS, NC, SC, TN

MCHB Region V

105 W. Adams Street, 17th Floor
Chicago, IL 60603
Phone: 312-353-4042
Fax: 312-886-3770
States - IL, IN, MI, MN, OH, WI

MCHB Region VI

1301 Young Street, 10th Floor, HRSA-4
Dallas, TX 75202
Phone: 214-767-3003
Fax: 214-767-3038
States - AR, LA, NM, OK, TX

MCHB Region VII

Federal Building, Room 501
601 E. 12th Street
Kansas City, MO 64106-2808
Phone: 816-426-5292
Fax: 816-426-3633
States - IA, KS, MO, NE

MCHB Region VIII

Federal Office Building, Room 409
1961 Stout Street
Denver, CO 80294
Phone: 303-844-7862
Fax: 303-844-0002
States - CO, MT, ND, SD, UT, WY

MCHB Region IX

Federal Office Building, Room 317
50 United Nations Plaza
San Francisco, CA 94102
Phone: 415-437-8101
Fax: 415-437-8105
States - AZ, CA, HI, NV, AS, FM, GU, MH, MP, PW

MCHB Region X

Mail Stop RX-23
2201 Sixth Avenue, Room 700,
Seattle, WA 98121
Phone: 206-615-2518
Fax: 206-615-2500
<http://www.mchb.hrsa.gov>
States - AK, ID, OR, WA

National Association for the Education of Young Children (NAEYC)

1509 16th Street, NW
Washington DC 20036
1-800-424-2460
<http://www.naeyc.org>

National Child Care Information Center

(Funded by the Child Care Bureau)
243 Church Street, NW 2nd Floor
Vienna, VA 22180
Phone: 1-800-616-2242
Fax: 1-800-716-2242
TTY: 1-800-516-2242
<http://www.nccic.org>

National Clearinghouse on Child Abuse and Neglect Information

330 C Street, SW
Washington, DC 20447
Phone: 800-394-3366
Fax: 703-385-3206
<http://www.calib.com/nccanch>

National Commission for Health Education Credentialing, Inc. (NCHEC)

944 Marcon BLVD., Suite 310
Allentown, PA 18103
Phone: 1-888-624-3248
Fax: 1-800-813-0727
E-mail: nchectce@fast.net
<http://www.nchech.org>

National Committee for the Prevention of Child Abuse

PO Box 2866
Chicago, IL 60690-9950
Phone: 312-663-3520
<http://www.childabuse.org>
E-mail: mail@preventchildabuse.org

National Resource Center for Health and Safety in Child Care

University of Colorado School of Nursing
Campus Mail Stop F541, P.O. Box 6508
Aurora, CO 80045-0508
Phone: 1-800-598-5437
Fax: 303-724-0960
<http://nrc.uchsc.edu>

Please note contact information may change. Check <http://nrc.uchsc.edu> for updates.

Contact Information

National Training Institute for Child Care Health Consultants

Department of Maternal and Child Health
University of North Carolina at Chapel Hill
116A S. Merritt Mill Rd. Box 8126
Chapel Hill, NC 27599-8126
Phone: 919-966-3780
Fax: 919-843-4752
E-mail: nticchc@sph.unc.edu

Occupational Health & Safety Administration (OSHA)

200 Constitution Avenue, N.W.
Washington, D.C. 20210
Phone: 202-693-1999
<http://www.osha.gov>
(Web site of OSHA Regional Office Contacts)

State and Territorial Injury Prevention Directors' Association

2141 Kingston Court, Suite 110-B
Marietta, GA 30067
Phone: 770-690-9000
Fax: 770-690-8996
E-mail:
<http://www.stipda.org/>

Superintendent of Documents

U.S. Government Printing Office
Washington, DC 20402
Phone: 202-512-2000
<http://www.gpo.gov>

US Consumer Product Safety Commission See Consumer Product Safety Commission, US

A

ABC's of Safe and Healthy Child Care, The 10
 Abrasions. See Cuts
 Accommodations 20, 21, **22**, 23, 24, 79
 ACIP. See Advisory Committee on Immunization Practices, U.S. Public Health Service
 Adhesives 5, 33
 Advisory Committee on Immunization Practices, U.S. Public Health Service 23
 Aides 2
 Air 9, 58, 64
 fresh 33
 indoor 30
 Air conditioning 33
 Air dry 12, 28
 Air fresheners
 chemical 32
 Air recirculation systems 33
 Airflow 58
 Airways **3**, **4**, **5**, 6, 79
 Alcohol 64
 Allergies **64**, 79
 reactions 4, 32
 American Academy of Pediatrics 3, 5, 7, 14, 15, 17, 22, 25, 32, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 61, 62, 63, **80**
 American Association for Health Education 8, 11, **80**
 American Heart Association 3, 5, **80**
 American Public Health Association 75, **80**
 American Society for Testing and Materials 31, 58, 59, **80**
 Americans with Disabilities Act 21, 22, **23**, 24, 25
 Animals 9, 56
 See also specific types (e.g. Dogs, Pets, etc.)
 Antibiotic treatment 35, 37, 38, 39, 42, 60, 61, 62
 judicious use of **43**
 Art and Creative Materials Institute 32, 80
 Arts and crafts materials 30, **31**, **32**, 77
 Asbestos 30, **31**
 encapsulated 31
 Assessments 20
 Asthma 43, 79
 triggers 64
 Attendance records 67

B

Bacteria 10, 12, 27, 35
 Balls 32
 Bandages **5**, 43
 Barriers 11, **26**, **27**, 29
 Bathrooms
 sanitation 11, **27**
 Beating. See Corporal punishment

Bedding
 cleaning 56
 Behavior, aggressive 51, **57**, 58
 Bicycles
 safety 8
 Binding, restricting movement 63
 Bites 4
 animal 4
 human. See Biting
 insect 4
 Biting 4, 15, 51, 55, **57**, 58, 64, 77
 Bleach solution **12**, 13, 28
 Bleeding 4, 6, 7, **26**, 51, 52, 54
 Blisters 43, 45
 Blizzards
 evacuation plan 16
 Blood 5, 7, 8, 9, 11, 12, 13, 14, 15, **26**, **27**, **28**, 33, 46, 51, 54, 55
 exposure 11, 26
 exposure prevention 2, 7, 11, 15, 25, **26**, 50, 51, 53, 55
 in stools 60
 See also Standard precautions
 Blood pressure 58, 79
 Bloodborne pathogens 7, 12, 15, **26**, **27**, 50, 52, 53, 54
 regulations 7, 26
 transmission 7, 11, 15, **26**, 50, 52, 54, 55
 Body fluids 7, 9, 11, 12, 13, 25, **27**, **28**, 29, 51
 exposure prevention 2, 7, 11, 12, 15, **26**, **27**, 51, 54, 55
 Bomb threat
 evacuation plan 16
 Breaks, work 57, 59, **65**, 77
 amount of time 60, **65**
 Breast milk. See Human milk
 Bronchitis **42**, 64
 Bruises 6
 Buildings 31, 34
 Burnout 65
 Burns **4**, 6
 See also Sunburn

C

Campylobacter gastroenteritis **49**, 77
 Cardiac arrhythmia 3
 Carpets 58
 cleaning and maintenance 11, 13, **27**, **28**
 Ceftriaxone **37**, **38**, 61
 Ceilings 59
 acoustical 58
 Center for the Child Care Workforce 66, **80**
 Centers
 benefits for staff 66

- policies 25, **65**
 - training of staff 1, 3, 6, 7, 25
 - use of health consultants 17, 18, 19
 - Centers for Disease Control and Prevention 10, 11, 23, 26, 44, 45, 48, 54, **80**
 - Certification
 - CPR 3
 - Food Service Manager's Protection 6
 - staff 67
 - Chairs 57
 - Chemicals 29, 30, 32
 - Chemoprophylaxis 37, 38, 61
 - Chewing tobacco. See under Tobacco use; Smoking
 - Chickenpox 21, 23, 24, 44, 45, 54, 60, 77
 - Child abuse 6, 59, 81
 - children's abuse of peers 2
 - education 6, 7
 - emotional 6, 16, **63**
 - extreme temperatures 63
 - physical 6, 7, 16, 59, 60, **63**
 - prevention 6, 7, 68
 - psychological 6
 - recognizing signs and symptoms 2, 6, 7, 18
 - registries 66
 - reporting 2, 6, 18, 67
 - sexual 6, 16, **63**, 67
 - verbal 63
 - Child and Adult Care Food Program, U.S. Department of Agriculture 6
 - Child Care Bureau 81
 - Child care workers. See Staff
 - Child development
 - program activities based on 8, 10
 - Children with special needs
 - consultation services 19, 20
 - emergency plan 5, 62
 - staff orientation 1
 - training about 8, 18
 - Child-staff ratios 16, 58, 59
 - Choking
 - first aid 3
 - Chronic illness 36
 - Cleaning and sanitation
 - areas used by ill children 47
 - carpets 11, 13, **27**, 28
 - equipment and materials used for 30
 - objects 51
 - sanitizer 12, **28**
 - sinks 10
 - spills of blood and body fluids 11, 12, 26, **27**, 28
 - surfaces 11, **27**
 - toys 51
 - training on 2, 14, 49
 - Clothing 43, 44, 56, 60
 - Cold sores 29, **43**, 61
 - Combs 57
 - Community services 18
 - Compensation and benefits 22, 25, 59, **65**, 66
 - educational 65
 - health 22, 25
 - merit increases 65
 - Compliance
 - with standards 63
 - with state regulations 6, 17
 - Conflict management 8
 - Conjunctivitis
 - purulent 60
 - Construction of facility 58
 - Consultation records 20
 - Consumer Product Safety Commission, U.S. 10, 31, 32, 33, 34, **80**
 - Continuing education 2, 14, 49
 - records 67
 - Continuity of care 21, 25
 - Contracts 19
 - Convulsions 4
 - Corporal punishment 63
 - Corrective action 33
 - Costs
 - of health exams 22, 25, **65**
 - Coughing 9, 41, 43
 - Criminal records 66
 - Croup 42
 - Cryptosporidium 48, 49, 54
 - Cultural groups 2
 - Curriculum 8, 9, 10, 11
 - Cuts 4, 9, 12, 27, **29**
 - Cytomegalovirus 13, **45**, 77
- ## D
- Daily health assessment 2
 - Death
 - reporting 16
 - statistics 54
 - Diapering 8
 - changing areas/tables 11, 27
 - disposal of diapers 1, 11, 27
 - procedure 1
 - table paper 11, 26
 - Diarrhea
 - exclusion because of 14, **46**, 47, 48, 49, **60**
 - incidence of 9, **48**
 - parent notification 47, 49, 54
 - records 50
 - reporting 14, **47**, 48, 49, 50
 - Salmonella 47, 49
 - staff education on 14, 49

- Dietitians 19
 Disability and Business Technical Assistance Centers **22**, 23, 25
 Disasters
 evacuation 16
 Discipline
 methods 1, **58**
 policy 1, **67**
 Drivers 63
 Drowning 3, 4
 Drugs
 community programs 64
 illegal 64
 staff use 64
 Dust 31, 33
- E**
- E. coli 0157.H7 47
 Ear infections 39, 42, 64
 Earthquakes
 evacuation plan 16
 Eating 8, 9
 Emergency contact 5, **66**, 67
 Emergency medical services 4, 5
 Emergency plans **15**, 16
 for children with special needs 5, **62**
 Emergency procedures 1, 2, 3, **5**, 32, 62
 Emergency rooms 16
 Employment history 67
 Enteric infections 14, **46**, 47, 49
 Environmental Protection Agency 29, 31, 32, 33, 34, **80**
 Epilepsy 79
 Epinephrine 4
 Equipment
 placement of 57
 safety of 57
 Erythromycin 38, 39, 61, 62
 Evacuation of children
 plan 16
 Evaluation
 of training 1, 4
 Exclusion 1
 of children 14, 39, 42, 43, 44, 47, 49, 50, 51, 61, 67
 of staff 47, 52, **60**, 65
 Exercise 8
 excessive 63
 Exits 16
 Exposure control plan 7, **26**
 See also Blood; Standard precautions
 Eye injuries 4
- F**
- Fainting 4
- Falls 77
 Fans 33
 Feces 11, 12, **27**, 28, 48, 50
 Fevers 38, 39, 41, 42, 43, 45, **60**, 61
 Fiberglass 31
 Field trips 5, 64
 Fighting 57
 Fire safety 8
 Fires
 causes of 64
 egress from 16
 First aid
 statistics on use 3, 5
 training 3, 4, 5, 7, 26
 First aid kits **5**, 16
 contents of 5
 in vehicles 5, 6
 Floods
 evacuation plans 16
 Floors
 cleaning **11**, 27
 Food and Drug Administration, U.S. 6
 Food handling 1, **6**, 8, 9, 48
 Food safety 48
 Food service
 training 6
 Food Service Manager's Protection (Sanitation) Certificate 6
 Foods
 forcing 63
 sharing 43
 uncooked 9
 withdrawal of 63
 Formaldehyde 30, 33
 Formula
 preparation 2
 Fractures 4
 Friable materials 31
 Fungicides 29
 Furniture
 size of 57
- G**
- Garbage 9
 Gases 31, 33
 Gastrointestinal problems 14, **46**, 47, 48, 49, 79
 Giardia lamblia 47, 48, 49, 77
 Gloves
 disposable 5, **13**, 28
 feeding human milk **11**, 12, 26, 27
 preventing exposure to blood or body fluids **11**, 12, 26, 27, 29
 procedure for removing gloves 78

- utility **13, 28**
- Goals of facility **1, 66**
- Group A streptococcal infections **39, 40**
 - exclusion criteria **39**
- H**
- Haemophilus influenzae type b infections **34, 35**
 - exclusion criteria **61**
 - immunizations **34**
- Hairbrushes **57**
- Handwashing
 - procedures **1, 8, 9, 43**
 - situations requiring handwashing **8, 9, 29, 43, 61**
 - training **8, 14, 43, 48, 49**
- Head lice **56, 77**
 - exclusion criteria **56, 60**
 - nits **56**
- Health appraisals **20**
- Health assessments
 - for staff **20, 21, 23, 24, 41, 65, 66, 67, 79**
 - daily **22**
- Health consultants **17, 19, 43, 62**
 - for facilities serving children with special needs **19**
 - frequency of visits **19**
 - knowledge and skills **17, 18**
- Health departments **32**
 - notification to health department of a communicable disease **14, 38, 39, 47, 48, 49, 50, 52, 62, 67**
 - resource for materials **63**
 - training from **6**
- Health education
 - for staff **13, 14, 15, 45, 49, 52, 55**
 - topics **8, 10**
- Health education specialist **8, 10, 11**
- Health hazards **21, 24, 31, 77**
- Health history **20, 24**
- Health insurance **65, 66**
- Health professionals
 - consultation from **17, 18, 19, 44, 45**
 - health assessment of staff **21, 22, 24**
- Health resources **17, 18**
- Healthy Child Care America Campaign **17, 80**
- Hearing impairment/loss **13, 45, 58**
- Hearing screening **20, 24**
- Heat exhaustion/stroke **4**
- Hepatitis A virus infections **14, 46, 47, 49, 50, 77**
 - exclusion criteria **47, 60**
 - immunizations **14, 21, 24, 47, 49**
- Hepatitis B immune globulin **51**
- Hepatitis B virus infections **12, 27, 50, 52, 77**
 - carrier **51, 52**
 - injuries to **52**
 - exclusion criteria **50**
 - immunizations **7, 21, 22, 23, 24, 25, 26, 50, 52**
 - transmission prevention **15, 52**
- Hepatitis C virus infections **12, 27, 50, 53, 77**
 - exclusion criteria **53**
 - transmission prevention **53**
- Herbicides **29**
- Herpes **6, 77**
- Herpes **7, 77**
- Herpes labialis **43**
- Herpes viruses **43**
 - herpes simplex **43, 77**
 - exclusion criteria **43, 61**
 - herpes zoster **44, 45, 77**
- Herpetic gingivostomatitis **43**
- Hitting **57, 58, 63**
- HIV **36, 44, 50, 53, 55, 77**
 - confidentiality **54**
 - exclusion criteria **53**
 - high risk for Tb **21, 24**
 - policies **53**
 - prevention **12, 15, 27, 55**
 - protecting HIV-infected children and adults **53, 54**
 - transmission of **15, 53, 55**
- Holidays **65**
- Human milk
 - cleaning up spills **11, 12, 26, 27**
 - feeding **11, 12, 26, 27**
- Humiliation **63**
- Hurricanes
 - evacuation plans **16**
- Hygiene **8, 10, 13, 14, 45, 48, 49**
- I**
- Ill children
 - isolation of **47, 62**
 - plan for care **62**
 - policies **62**
- Ill children, facilities for
 - separate areas **47**
- Illnesses
 - documentation **62, 67**
 - recognizing symptoms **42**
 - reporting **22**
 - training about **63**
 - transmission
 - preventing **2, 9, 11, 22, 27, 29, 65**
- Immune globulin **14, 47, 49, 51, 54**
- Immunizations **7, 18, 23, 26, 60**
 - exemptions **34, 35, 36**
 - for staff **18, 20, 22, 23, 25, 65**
 - records **79**
- Impetigo **60, 77**

Incense 32
 Incidence logs 67, 68
 Inclusion
 criteria 14, 19, 49, 50, **62**
 Indoor air pollution 30, 33, 77
 Injuries
 back **57**, 77, 79
 cold 4
 dental 4, 16
 eye 4
 head 4
 heat-related 4
 incidence of 3, 5
 musculoskeletal 4
 notifying parents 57
 reporting 22
 plan 16
 report forms 67, 68
 to HBV carrier 52
 to HIV infected individual 54
 to staff 22, **65**, 77
 treating 4, 32, 52
 water-related 3
 Inspections
 for lead 34
 Insulation 31, 33
 Insurance
 liability 59

J

Jaundice 47
 Job descriptions 21, **24**, 66
 Job security 59

K

Keeping Healthy 10
 Kissing 43, 61

L

Language development 58
 Laundry
 hamper 9
 Lead
 abatement 33, 34
 in buildings 33
 in paint 33, 34
 in soil 34
 in toys 33
 testing 33, 34
 Lead poisoning 34
 Leave
 bereavement 65

educational 65
 family 65
 medical 65
 parental 65
 personal 65
 sick 59, 62, **65**, 66
 vacation 65

Lesions 43, 45, 51, 56, 60, 61
 Liabilities
 regarding staff 22, 77
 Licensing agencies 1, 6, 17, 63
 Locks 29
 Loss of consciousness 4
 Lost child 15

M

Management of a blocked airway and rescue breathing **3**, 4, 6
 Mantoux intradermal skin test 21, 24, **40**, 41, 79
 Material Safety Data Sheets 29, 30, 31
 Maternal and Child Health Bureau 17, **80**
 Meal patterns 1
 Measles 21, 23, 24, 54, **60**, 77
 Measles-mumps-rubella vaccine **21**, 23, 24
 Medication administration 8, 18, 19, **20**
 policies 2, 19, **62**
 training 2
 Medications
 availability 5
 inappropriate use of 64
 Mini-blinds 34
 vinyl 33
 Missing children 15
 Model Child Care Health Policies 21, 25, 62
 Modeling behavior 2, 8, **64**
 Moth balls/crystals 32
 Motor vehicles
 no smoking 63
 supplies 5
 Mouth sores, secretions 43
 Mumps **21**, 23, 24, 77

N

National Asbestos School Hazard Abatement Act of 1984 31
 National Association for the Education of Young Children 10, 16, 21, 22, 25, **81**
 National Child Care Information Center 81
 National Clearinghouse on Child Abuse and Neglect Information 7, **81**
 National Commission for Health Education Credentialing, Inc. 8, 11, **81**
 National Committee for the Prevention of Child Abuse

- 6, **81**
 National Resource Center for Health and Safety in Child Care 17, **81**
 National Training Institute for Child Care Health Consultants 17, **82**
 Native language 19
 Neglect 2, **6**, 7, 16, 18, 67
 Neisseria meningitidis infections **37**, 77
 exclusion criteria **37**, 61
 Neurotoxicant 34
 Noise **59**, 77
 control measures 58
 levels 58, 59
 Noise reduction 59
 Notification of illnesses/infectious diseases
 to health department 35, 36, 37, 38, 40, 50, 52, 62, 67
 to health provider 62, 67
 to parents 35, 36, 37, 38, 39, 40, 44, 49, 54, 56, 62, 67
 Nutrition
 consultants 17, 18
 education
 children 8
 staff 10
 training on 1, 10
- O**
- Occupational exposure 7, **25**, 26
 Occupational hazards 1, 21, 24, **25**, 30, 57, 58, 77
 Occupational Safety and Health Administration 7, 11, **26**, 27
 Occupational therapists 19
 Oral health
 education 8, 10
 Orientation of staff 1, 2, 65
 records 67
 training 1, 2
 Outdoor space 64
 Overtime 65
- P**
- Paint
 lead 33, 34
 Parent education 2
 on child abuse 6
 Parent relations 1
 information exchange 64
 Parental consent 19, 37
 Parents
 as health consultants 17
 of children with special needs 19
 of ill children 62
 Parvovirus B19 21, 24, **42**, 54, 77
 Pediatric nurse practitioners 19
 Pennsylvania 17
 Pertussis **38**, 77
 antibiotics 38, 39
 exclusion criteria **39**, **60**, 61
 immunization 38
 Pest control 30
 Pesticides 29, 30
 Pets 9
 Philosophy of the facility 1
 Physical punishment 63
 Physical therapists 19
 Pinching 63
 Pipes 31
 Plants
 poisonous 32
 Play areas 34
 outdoor 64
 Play equipment 33
 Playground safety inspectors 19
 Plumbing 10
 Poison control center 5, 29, 32
 Poisoning 4, 30, 32
 lead. See Lead poisoning
 Poisonous materials 30, 32
 Policies
 acts of aggression 57
 confidentiality 67
 discipline 67
 emergency care **16**, 62
 evacuation 16
 exclusion 50, 62, 65
 exposure to blood/body fluids 7, **26**
 food handling 1
 ill children 62
 infectious diseases 13, 14, 45, 49, 53
 medication administration 2, 62
 occupational health 25
 parent relations 1
 safety 1
 smoking and prohibited substances 8
 staff 65, 67
 staff stress 60
 training 16
 Pregnancy
 infection risks 13, 35, 44, 45, **65**
 of staff 1, 22, 25, 33, 38, 60, 61
 Prohibited substances 64
 policies 64
 Prophylaxis 15, 35, 36, 37, 47, 55, 61
 Puncture wounds 4
 Punishment 63

Q

- Qualifications
 - of health consultants 17, 18
- Quality 59, 65

R

- Radon 31
- Rash 4, 42, 56, 79
- Raw meat 9
- Readmission policy 19, 44, 47, 54
- Recommended Childhood Immunization Schedule 36
- Records
 - child abuse 6
 - criminal 66
 - driving 66
 - illness 62, **67**
 - injury 68
 - personnel **66**, 67
 - staff health 18, 50, **66**
 - Tb testing **21**, 24
 - training 3, **66**, 67
- Red Book, The 14, 15, 35, 36, 37, 38, 40, 41, 42, 43, 44, 45, 46, 48, 50, 51, 52, 53, 54, 55, 56, 57, 62
- Regulations
 - compliance with 67
 - enforcement 18
 - on toxic substances 31, 33
 - training on 1
- Remodeling 31
- Respiratory infections 42, 43, 64
- Respiratory therapist 19
- Rest periods 8
- Retention 4, **65**
- Retirement 65
- Retirement plans 65
- Rheumatic fever 39
- Rifampin 35, 37, 38, 61
- Ringworm **56**, 77
- Rubella **21**, 23, 24, 60, 77
- Runny nose 42

S

- Salmonella typhi **54**, 77
 - diarrhea caused by 47, 49
- Sandboxes
 - handwashing after playing in 9
- Scabies **56**, 77
 - exclusion criteria 56, 60
- Scarlet fever 39
- School-age child
 - discipline 64
- Scrapes 7, 26, **29**

- Screening tests **20**, 21, 24, 41, 51, 52
- Secondhand smoke 8, **63**, 64
- Seizures 4
- Self-esteem 8
- Separation 47, 57, 62, 64
- Serum antibody testing 13, 14, 45, 46
- Sexually transmitted diseases 6
- Shaken baby syndrome 6, 63
- Shigella
 - diarrhea caused by 47, 49, 60
- Shingles 44, **45**, 60
- Shock 4
- Sinks
 - camp 10
- Skin infections 60
- Skin sores 9, 43, 55
- Sleep position 2
- Smoking
 - in vehicles 63
 - policies 64
- Soap 9
 - antibacterial 10
 - bar 10
 - liquid 5, 9
- Social Security 65
- Sores 8, 12, 27, 29, 43, 44
- Sound-absorbing materials 59
- Spanking 63
- Sprains 4
- Staff
 - benefits 65, 66
 - disciplinary action 65
 - exclusion for illness 39, 44, 47, **60**, 61
 - health limitations 22
 - health education **8**, 10, 13, 14, 15, 45, 49, 55
 - occupational hazards 1, 13, 14, 16, **25**, 29, 30, 31, 32, 33, 45, 46, 57, 77
 - orientation **1**, 2, 65, 67
 - performance evaluation 16, 59, 65, **67**
 - policies 65
 - prohibited behaviors 63
 - records 50, **66**, 67, 68
 - stress 59, 60
 - training **2**, 3, 4, 5, 6, 7, 13, 14, 15, 16, 20, 25, 26, 28, 49, 52, 54, 67
 - turnover 2, 20, **59**, 65
- Stairs/stairways 57
- Standard precautions 2, 3, 5, 7, **11**, 12, 26, 27, 51, 53, 54
- State pesticide sensitivity list 30
- Sterile gauze pads 5
- Storage areas
 - infectious/toxic substances and waste 29
- Strangulation 10
- Strep throat 39, **40**, 60

- Streptococcal infections **40**, **77**
 exclusion criteria 39, 60
 Streptococcus pneumoniae 36
 vaccine 36
 Stress 16, 58, **59**, **60**, 65, 66, 77, 79
 Students, as health consultants 17
 Substitutes 16, 22, 40, 59, 60, 65, 66
 Sudden Infant Death Syndrome 2
 Superintendent of Documents 58, 82
 Supervision
 during transport 64
 of ill children 47
 Supplies
 art 32
 emergency 5, 16
 Swimming
 CPR certification 3
 Symptoms of illness 2, 9, 12, 28, 38, 39, 42, 48, 55, 61, 62, 67
 Symptoms record 63, **67**
 Syrup of ipecac 5
- T**
- Tables 57
 Technical assistance 4
 Temperature
 child's 4
 extreme 63
 water 9
 Termination
 of staff 22, **65**
 Thermometers 5
 Threatening incidents 1, **15**
 Time outs 64
 Tobacco use 64
 chewing 64
 policies 8, **64**
 Toilet learning/training 1
 Tooth brushing 51
 Toothbrushes 51
 Tornadoes, evacuation plan 16
 Touching 9, 29
 Towels 9, 10
 Toxic substances **29**, 30, 32, 33, 64
 informing staff of 30
 storage of 29
 Toys
 cleaning **11**, 27, 51
 safety of 33
 Training
 child abuse 6
 CPR 3, 4
 emergency procedures 15
 food service 6
 of health consultants 17, 18
 on handwashing 48
 ongoing 2
 orientation 1, 2
 pediatric first aid 3, 4
 records 66
 standard precautions 7, **11**, 13, 15, 25, 26, 28, 52, 54
 Transportation
 policies 64
 Tuberculosis (Tb) **40**, 41, 54, 77
 exclusion criteria 41, 60
 screening 21, 24, **40**, 41
 Turnover 2, 20, **59**, 65, 66
- U**
- United States Department of Agriculture 6
 United States Food and Drug Administration 6
 Unspecified respiratory tract infection 42, 43
 Urgent medical care **15**, 16, 62
 Urine 9, 11, 12, 13, 15, 27, 28, 45, 46, 55
 Use of Health Consultants 17
- V**
- Ventilation 29, 30, 32
 carpeted areas 33
 Violence prevention 8
 Vomiting
 exclusion criteria 60
- W**
- Waste
 human 9, **12**, 28
 Wheezing 43
 Window coverings 34
 Windows 33
 Workers' compensation 22, 57, 65