

**American Academy of Pediatrics  
Child Care Health and Safety Articles**

**The Epidemiology of Injuries in Four Child Care Centers**

This 2-year cohort study describes the pattern of injury in 362 preschool-aged children in 4 child care centers as compared with the results of other studies. In addition, the study compares injury rates by sex, age, and child care center and examines environmental and child factors contributing to injury severity.

<http://archpedi.ama-assn.org/cgi/reprint/153/12/1248?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&fulltext=Injuries+in+child+care+centers%3A+Gender+environment+interactions&searchid=1&FIRSTINDEX=0&resourcetype=HWCIT>

Alkon A, Genevro J, Kaiser P, et al. The epidemiology of injuries in four child care centers. *Arch Pediatr Adolesc Med.* 1999;153:1248-54

**Injuries in Child Care Centers: Gender-Environment Interactions**

This 2-year prospective study of 360 preschool children, ages 2–6 years, was conducted in 4 urban child care centers, and examines child characteristics (age, gender) and child care center environments (socioemotional quality, physical safety) that jointly predict injuries for preschool children. <http://ip.bmj.com/cgi/reprint/6/3/214>

Alkon A, Genevro J, Kaiser P, Tschann J, Chesney M, Boyce WT. Injuries in child care centers: gender-environment interactions. *Inj Prev.* 2000; 6:214-18

**Preparing Our Children to Learn: Report of the Select Committee on California Children's School Readiness and Health**

This report of the Select Committee on California Children's School Readiness and Health, established in 2001, examines the relationship between the status of a child's health and its impact on school readiness and achievement.

[http://eric.ed.gov/ERICDocs/data/ericdocs2/content\\_storage\\_01/0000000b/80/0d/dd/4e.pdf](http://eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/0d/dd/4e.pdf)

Chan, W. Preparing our children to learn: report of the select committee on California children's school readiness and health. Oakland, CA: California Assembly, Select Committee on California Children's School Readiness and Health; 2002

**Social and Emotional Aspects of School Readiness: What's Available in National Data Sources?**

This Microsoft PowerPoint was presented at the Society for Research in Child Development (SRCD) 2003 Biennial Meeting in Tampa, Florida. The presentation describes four national data sources that include indicators of social and emotional development: the Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K), the Head Start Family and Child Experiences Survey (FACES), the National Household Education Surveys Program (NHES), and the National Survey of America's Families (NSAF).

<http://www.childtrends.org/Files/HairSRCDPPT1.pdf>

Halle T, Vandivere, Pitzer L, Cochran. Social and emotional aspects of school readiness: What's available in national data sources? Washington, DC: Child Trends; 2003

**What Research Tells Policymakers About Strategies to Promote Social and Emotional School Readiness Among Three- and Four-year-old Children**

This report focuses on what emerging research tells policy-makers about why it is so important to intervene and help young children at risk of poor social, emotional, and behavior development. [www.nccp.org/media/pew02c-text.pdf](http://www.nccp.org/media/pew02c-text.pdf)

Raver CC, Knitzer J. Ready to enter: what research tells policymakers about strategies to promote social and emotional school readiness among three- and four-year-old children. New York, NY: National Center for Children in Poverty; 2002

**Set for Success: Building a Strong Foundation for School Readiness Based on the Social-Emotional Development of Young Children**

This post-conference report compiles 7 papers that present scientific findings on the importance of social and emotional school readiness. [http://www.kauffman.org/pdf/eex\\_brochure.pdf](http://www.kauffman.org/pdf/eex_brochure.pdf)

Ewing Marion Kauffman Foundation. Set for success: building a strong foundation for school readiness based on the social-emotional development of young children. Kansas City, MO: The Kauffman Early Education Exchange; 2002;1

**Early Childhood Mental Health Services: A Policy and Systems Development Perspective**

This book includes information about coordinating mental health services with early childhood programs.

Knitzer J. Early childhood mental health services: A policy and systems development perspective, in Handbook of Early Childhood Intervention (2<sup>nd</sup> Ed.) edited by Jack Shonkoff and Samuel Meisels. New York, NY: Cambridge University Press; 2000

**A Good Beginning: Sending America's Children to School with the Social and Emotional Competence They Need to Succeed**

This paper examines the current state of research regarding the social and emotional risk and protective factors that predict early school problems or success.

Child Mental Health Foundations and Agencies Network. A good beginning: Sending America's children to school with the social and emotional competence they need to succeed. Bethesda, MD: Child Mental Health Foundations and Agencies Network; 2000

**Healthy Children Ready to Learn: An Essential Collaboration Between Health and Education**

The "Healthy Children Ready to Learn" initiative starts with the underlying concept that health is a critical partner to optimal education.

<http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=1403595&blobtype=pdf>

Novello AC, Degraw C, Kleinman DV. Healthy children ready to learn: an essential collaboration between health and education. *Public Health Reports*. 1992;107(1):3-15

### **Early Intervention in Low Birth Weight Premature Infants: Results at 18 Years of Age for the Infant Health and Development Program**

This study was a prospective follow-up to the Infant Health and Development Program at 8 sites heterogeneous for sociodemographic characteristics. To assess whether improvements in cognitive and behavioral development seen in preschool educational programs persist, the study compared those in a multisite randomized trial of such a program over the first 3 years of life to those with follow-up only at 18 months of age.

<http://pediatrics.aappublications.org/cgi/reprint/117/3/771>

McCormick MC, Brooks-Gunn J, Buka SL, et al. Early intervention in low birth weight premature infants: results at 18 years of age for the infant health and development program. *Pediatrics*. 2006;117:771-708

### **Prekindergarteners Left Behind: Expulsion Rates in State Pre-Kindergarten Systems**

Expulsion is the most severe disciplinary sanction that an educational program can impose. Results are reported from a national study of 3,898 prekindergarten classrooms (81.0% response rate), representing all of the nation's 52 state-funded prekindergarten systems currently operating across 40 states. [http://www.fcd-us.org/usr\\_doc/ExpulsionCompleteReport.pdf](http://www.fcd-us.org/usr_doc/ExpulsionCompleteReport.pdf)

Gilliam, WS. Prekindergarteners left behind: expulsion rates in state prekindergarten systems. New Haven, CT: Yale University Child Study Center; 2005

### **Economic Impact of an Infection Control Education Program in a Specialized Preschool Setting**

This study assesses the economic impact, from a societal perspective, of a multidimensional infection control education program in a preschool for children with Down syndrome.

<http://pediatrics.aappublications.org/cgi/reprint/108/6/e102.pdf>

Ackerman SJ, Duff SB, Dennehy PH, Mafilios MS, Krilov LR. Economic impact of an infection control education program in a specialized preschool setting. *Pediatrics*. 2001;108(6)

### **Preventing Acute Respiratory Infections and Diarrhoea in Child Care Centres**

This study was designed to explore the physical characteristics and child care practices of child care centres as potential risk factors for respiratory infections and diarrhoea in children 3-35 months of age.

Barros AJD, Ross DA, Fonseca WVC, Williams LA, Moreira-Filho DC. Preventing acute respiratory infections and diarrhoea in child care centres. *Acta Paediatrica*. 1999;88:1113-1118

### **Handwashing to Prevent Diarrhea in Day-care Centers**

Diarrhea has been recognized as a frequent health problem among children enrolled in day-care centers. Thus, the study evaluated the effect of a handwashing program in 2 day-care centers on the incidence of diarrhea among children when compared to children in 2 control centers.

Black RE, Dykes AC, Anderson KE, Wells JG, Sinclair SP, Gary GW, Hatch MH, Gangarosa EJ. Handwashing to prevent diarrhea in day-care centers. *American Journal of Epidemiology*. 1981;113:445-451

### **Comparison Between Two Common Methods for Reporting Cold and Diarrhoea Symptoms of Children in Daycare Centre Research**

The increasing number of children attending day care centres in industrialized countries has refocused attention on the occurrence of infections and infectious diseases in these settings. This study evaluates the agreement between 2 methods (parent method vs. educator method) for reporting the occurrence of respiratory and diarrhoeal infections.

Carabin H, Gyorkos TW, Soto JC, Joseph L, Collet J-P. Comparison between two common methods for reporting cold and diarrhoea symptoms of children in daycare centre research. *Child: Care, Health and Development*. 2000;26:471-487

### **Effectiveness of a Training Program in Reducing Infections in Toddlers Attending Day Care Centers**

The objective of this study was to assess the effectiveness of a hygiene program in reducing the incidence of respiratory and diarrheal diseases in toddlers attending day care centers. A randomized field trial was conducted in 52 day care centers in Quebec, Canada, between September 1, 1996 and November 30, 1997.

Carabin H, Gyorkos TW, Soto JC, Joseph L, Payment P, Collet J-P. Effectiveness of a training program in reducing infections in toddlers attending day care centers. *Epidemiology*. 1999 May;10:219-227

### **Estimation of Direct and Indirect Costs Because of Common Infections in Toddlers Attending Day Care Centers**

This study describes both the direct and the indirect costs of illness in a closely followed cohort of toddlers attending day care centers in Quebec, Canada.

<http://pediatrics.aappublications.org/cgi/reprint/103/3/556.pdf>

Carabin H, Gyorkos TW, Soto JC, Penrod J, Joseph L, Collet J-P. Estimation of direct and indirect costs because of common infections in toddlers attending day care centers. *Pediatrics*. 1999;103:556-562

### **A Cluster of Invasive Pneumococcal Disease in Young Children in Child Care**

The objective of this study was to investigate a cluster of invasive pneumococcal disease in children 8 to 26 months of age, using standard microbiological procedures and ribosomal DNA gene-restriction patterns to characterize the outbreak strain.

Cherian T, Steinhoff MC, Harrison LH, Rohn D, McDougal LK, Dick J. A cluster of invasive pneumococcal disease in young children in child care. *Journal of the American Medical Association*. 1994;271:695-697

### **Infection Control Challenges in Child-care Centers**

The child-care environment predisposes young children to infection with a variety of pathogens. This article describes the factors contributing to increased incidence of certain infections such as age-specific hygiene behaviors, immunologic immaturity of young children, and exposure to pathogens with high infectivity.

Churchill RB, Pickering LK. Infection control challenges in child-care centers. *Infectious Disease Clinics of North America*. 1997;11:347-365

### **Partial Uptake of Varicella Vaccine and the Epidemiological Effect on Varicella Disease in 11 Day-care Centers in North Carolina**

The increasing use of varicella vaccine in children attending day care has rapidly decreased the incidence of wild-type varicella disease. The herd immunity noted is significant and will have an effect on the epidemiology of natural varicella. This study monitored the change in varicella incidence in day-care attendees after the licensure of varicella vaccine.

<http://archpedi.ama-assn.org/cgi/reprint/155/4/455.pdf>

Clements DA, Zaref JI, Bland CL, Walter EB, Coplan PM. Partial uptake of varicella vaccine and the epidemiological effect on varicella disease in 11 day-care centers in North Carolina. *Arch Pediatr Adolesc Med*. 2001;155:455-461

### **Risk of Infectious Diseases in Children Attending Different Types of Day-care Setting**

This population-based prospective cohort study compared the risk of recurrent infections in children attending family day care, small day-care centers, and large day-care centers.

Collet J-P, Burtin P, Gillet J, Bossard N, Ducruet T, Durr F. Risk of infectious diseases in children attending different types of day-care setting. *Respiration*. 1994;61:16-19

### **Illnesses and Absence Due to Illness Among Children Attending Child Care Facilities in Seattle-King County, Washington**

Although much of the economic impact of child care-associated illness in the United States is due to parents' time lost from work, there are no data on the incidence of absence due to illness among children in various types of out-of-home child care settings in the United States. The goals of this study were to compare the incidence of illness and absence due to illness among children attending child care homes and child care centers.

<http://pediatrics.aappublications.org/cgi/reprint/100/5/850.pdf>

Cordell RL, MacDonald JK, Solomon SL, Jackson LA, Boase J. Illnesses and absence due to illness among children attending child care facilities in Seattle-King County, Washington. *Pediatrics*. 1997;100:850-855

### **Provider-reported Illness and Absence Due to Illness Among Children Attending Child-care Homes and centers in San Diego, Calif**

The objective of this study was to compare the incidence of provider-reported illness and absence due to illness among children attending small child-care homes, large child-care homes, and child care centers in a large metropolitan area.

<http://archpedi.ama-assn.org/cgi/reprint/153/3/275.pdf>

Cordell RL, Waterman SH, Chang A, Saruwatari M, Brown M, Solomon SL. Provider-reported illness and absence due to illness among children attending child-care homes and centers in San Diego, Calif. *Archives of Pediatrics and Adolescent Medicine*. 1999;153:275-280

### **Pertussis Containment in Schools and Day Care Centers During the Cincinnati Epidemic of 1993**

In 1993, a pertussis epidemic occurred in Cincinnati. This article describes the city's experience with the pertussis guideline program that confirmed the value of clear, widely disseminated guidelines, community-wide surveillance, and aggressive outreach.

<http://www.ajph.org/cgi/reprint/87/3/460.pdf>

Christie CDC, Marx ML, Daniels JA, Adock MP. Pertussis containment in schools and day care centers during the Cincinnati epidemic of 1993. *American Journal of Public Health*. 1997;87:460-462

### **Effectiveness of Influenza Vaccination of Day Care Children in Reducing Influenza-related Morbidity Among Household Contacts**

A growing proportion of young children in the United States participate in day care, and these children are considered to be at high risk for influenza infection. This study evaluates the effect of vaccinating day care children on reducing influenza-related morbidity among their household contacts. <http://jama.ama-assn.org/cgi/reprint/284/13/1677.pdf>

Hurwitz ES, Haber M, Chang A, Shope T, Teo S, Ginsberg M, Waecker N, Cox NJ. Effectiveness of influenza vaccination of day care children in reducing influenza-related morbidity among household contacts. *Journal of the American Medical Association*. 2000;284:1677-1682

### **Transmission and Control of Infections in Out-of-home Child Care**

Research on effective strategies for reducing infections associated with out-of-home child care has lagged far behind the research on other aspects of these infections. This review highlights key points regarding the epidemiology and transmission of infections associated with out-of-home day care and summarizes and critiques published reports of interventional studies designed to reduce the frequency of common respiratory and gastrointestinal infections.

Huskins WC. Transmission and control of infections in out-of-home child care. *Pediatric Infectious Disease Journal*. 2000;19:S106-S110

### **Pathogen Transmission in Child Care Settings Studied by Using a Cauliflower Virus DNA as a Surrogate Marker**

Two regions of cauliflower mosaic virus DNA were designed as markers to study pathogen transmission in a child care home and child care center and in homes of children who attended child care centers. This study describes the major factors leading to spread of the markers.

[http://www.journals.uchicago.edu/JID/journal/issues/v177n4/ap32\\_881/ap32\\_881.web.pdf](http://www.journals.uchicago.edu/JID/journal/issues/v177n4/ap32_881/ap32_881.web.pdf)

Jiang X, Dai X, Goldblatt S, Bruescher C, Cusack TM, Matson DO, Pickering LK. Pathogen transmission in child care settings studied by using a cauliflower virus DNA as a surrogate marker. *Journal of Infectious Disease*. 1998;177:881-888

### **Respiratory Infections in Infants: Interaction of Parental Allergy, Child Care, and Siblings—the PIAMA Study**

This study investigates the association between contacts with other children and the development of respiratory infections in the first year of life in children with or without genetic predisposition for allergy. <http://pediatrics.aappublications.org/cgi/reprint/108/4/943.pdf>

Koopman LP, Smit HA, Heijnen M-LA, Wijga A, van Strein RT, Kerkhof M, Gerritsen J, Brunekreef B, de Jongste JC, Neijens HJ. Respiratory infections in infants: interaction of parental allergy, child care, and siblings—the PIAMA study. *Pediatrics*. 2001;108:943-948

### **Evaluation of an Hygienic Intervention in Child Day-care Centers**

The purposes of this study were to develop a feasible, multicomponent hygienic intervention in child day-care centers and to carefully measure its impact while controlling for sources of bias. <http://pediatrics.aappublications.org/cgi/reprint/94/6/991.pdf>

Kotch JB, Weigle KA, Weber DJ, Clifford RM, Harms TO, Loda FA, Gallagher PN, Edwards RW, LaBorde D, McMurray MP, Rolandelli PS, Faircloth AH. Evaluation of an hygienic intervention in child day-care centers. *Pediatrics*. 1994;94(Suppl):991-994

### **Impact of an Infection Control Program in a Specialized Preschool**

The purpose of this study was to design and implement a comprehensive infection control program and measure its effects on the number and types of infectious illnesses experienced by children attending a specialized preschool program.

Krilov LR, Barone SR, Mandel FS, Cusack TM, Gaber DJ, Rubino JR. Impact of an infection control program in a specialized preschool. *American Journal of Infectious Control*. 1996;24:167-173

### **Form of Day Care and Respiratory Infections Among Finnish Children**

The relationship between respiratory infectious diseases and form of day care was assessed in this retrospective cohort study of 2568 randomly selected children in Espoo, Finland. <http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=1615809&blobtype=pdf>

Louhiala PJ, Jaakkola N, Ruotsalainen R, Jaakkola JJK. Form of day care and respiratory infections among Finnish children. *American Journal of Public Health*. 1995;85:1109-1112

### **The Public Health Problem of Acute Respiratory Illness in Childcare**

Acute respiratory illness continues to be a significant problem for children attending childcare. The problems for the child are in terms of prevalence, incidence, and quality of life. Additional costs relate to parental absence from work and loss of earnings. This paper reports on the literature, and notes that little research has been undertaken to determine whether there are long-term risks or benefits to experiencing acute respiratory illness in early childhood. Research to

date is presented, and the role of public health nurses is discussed in relation to how they might assist in reducing the incidence/prevalence of acute respiratory illness in children attending childcare.

McCutcheon H, Fitzgerald M. The public health problem of acute respiratory illness in childcare. *Journal of Clinical Nursing*. 2001;10:305-310

### **Day Care Centers and Respiratory Health**

The objective of this study was to estimate the effects of the type of day care on respiratory health in preschool children. <http://pediatrics.aappublications.org/cgi/reprint/103/4/753.pdf>

Nafstad P, Hagen JA, Oie L, Magnus P, Jaakkola JJK. Day care centers and respiratory health. *Pediatrics*. 1999;103:753-758

### **Staying Healthy in Child Care: Preventing Infectious Disease in Child Care, 4<sup>th</sup> Edition**

This publication aims to assist anyone caring for children, in home day care situations or within child care organizations, and healthcare professionals in controlling the spread of childhood infections. *Staying Healthy in Child Care* provides simple and effective methods for minimizing the spread of infections for many common childhood diseases encountered in child care organizations and the home.

[http://www.nhmrc.gov.au/publications/synopses/\\_files/ch43.pdf](http://www.nhmrc.gov.au/publications/synopses/_files/ch43.pdf)

National Health and Medical Research Council. *Staying healthy in child care: preventing infectious disease in child care, 4<sup>th</sup> edition*. Australia: Commonwealth of Australia; 2005

### **Proper Handwashing Promotes Wellness in Child Care**

The purpose of this study was to determine the effectiveness of an instructional program on handwashing. The study proved that an instructional program on germs and handwashing in child care could significantly reduce the spread of infectious diseases in the test center.

Niffenegger JP. Proper handwashing promotes wellness in child care. *Journal of Pediatric Health Care*. 1997;11:26-31

### **Comparing Hand Washing to Hand Sanitizers in Reducing Elementary School Students' Absenteeism**

School nurses are responsible for minimizing health threats that interfere with students' learning and staff participation (Rodriguez, 2002). Hand cleansing is an effective method for preventing the spread of infection and reducing illness-related absenteeism (Morton & Schultz, 2004).

Although the benefits of hand cleansing are clearly recognized, initiating and sustaining appropriate hand-washing practices among elementary school children is difficult due to the students' developmental level and constraints in school settings. Anti-microbial gel hand sanitizers appear to be a viable alternative to soap and water and offer other distinct advantages in the school setting. The purpose of this study was to compare the efficacy of a hand sanitizer to standard hand washing in reducing illness and subsequent absenteeism in school-age children.

Vessey JA, Sherwood JJ, Warner D, Clark D. Comparing hand washing to hand sanitizers in reducing elementary school students' absenteeism. *Pediatric Nursing*. 2007;33:368-372

### **Consumer Antibacterial Soaps: Effective or Just Risky?**

Much has been written recently about the potential hazards versus benefits of antibacterial (biocide)–containing soaps. The purpose of this systematic literature review was to assess the studies that have examined the efficacy of products containing triclosan, compared with that of plain soap, in the community setting, as well as to evaluate findings that address potential hazards of this use—namely, the emergence of antibiotic-resistant bacteria.

Aiello AE, Larson, EL, Levy SB. Consumer antibacterial soaps: effective or risky? *Clinical Infectious Diseases*. 2007;45:S137-147

### **Day Care Attendance, Recurrent Respiratory Tract Infections and Asthma**

The objective of the study was to use a causal model for childhood asthma to estimate the association between day care attendance before 3 years of age and later asthma, taking into account the effect of infections as an intervening variable.

<http://ije.oxfordjournals.org/cgi/reprint/28/5/882.pdf>

Nystad W, Skrondal A, Magnus P. Day care attendance, recurrent respiratory tract infections and asthma. *International Journal of Epidemiology*. 1999;28:882-887

### **Effect of Infection Control Measures on the Frequency of Diarrheal Episodes in Child Care: A Randomized, Controlled Trial**

Diarrheal infections are common in children who attend child care, and preventing transmission of disease in this setting depends on actions by child care staff. This study discovers whether transmission of gastrointestinal infections in child care could be reduced by improved infection control procedures. <http://pediatrics.aappublications.org/cgi/reprint/105/4/743.pdf>

Roberts L, Jorm L, Patel M, Smith W, Douglas RM, McGilchrist C. Effect of infection control measures on the frequency of diarrheal episodes in child care: a randomized, controlled trial. *Pediatrics*. 2000;150:743-746

### **Effect of Infection Control Measures on the Frequency of Upper Respiratory Infection in Child Care: A Randomized, Controlled Trial**

Acute upper respiratory infections are common in children who attend child care, and preventing transmission of disease in this setting depends on actions by child care staff. This study discovers whether transmission of respiratory infections in child care could be reduced by improved infection control procedures. <http://pediatrics.aappublications.org/cgi/reprint/105/4/738.pdf>

Roberts L, Smith W, Jorm L, Patel 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;105:738-742

### **An Outbreak of Hepatitis A in a French Day-care Center and Efforts to Combat it**

An outbreak of hepatitis A in a French day-care center was identified during a survey of risk factors for such events in a sample of 210 centers.

Severo CA, Abensur P, Buisson Y, Lafuma A, Detournay B, Pechevis M. An outbreak of hepatitis A in a French day-care center and efforts to combat it. *European Journal of Epidemiology*. 1997;13:139-144

### **Hygienic Practices and Acute Respiratory Illness in Family and Group Day Care Homes**

This study describes hygiene practices in licensed group day care and family day care homes and the association between these practices and the prevalence of respiratory illnesses in the children in attendance. <http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=1308439&blobtype=pdf>

St. Sauver J, Khurana M, Kao A, Foxman B. Hygienic practices and acute respiratory illness in family and group day care homes. *Public Health Reports*. 1998;113:544-551

### **Child Care and Common Communicable Illnesses: Results From the National Institute of Child Health and Human Development Study of Early Child Care**

This study examines the relationship between experiences in child care and communicable illnesses (gastrointestinal tract illness, upper respiratory tract infection, and ear infections or otitis media) throughout the first 3 years of life and investigates whether increased frequency of these illnesses is related to language development, school readiness, and behavior problems. <http://archpedi.ama-assn.org/cgi/reprint/155/4/481.pdf>

The National Institute of Child Health and Human Development Early Child Care Research Network. Child care and common communicable illnesses: results from the National Institute of Child Health and Human Development Study of Early Child Care. *Archives of Pediatrics and Adolescent Medicine*. 2001;155:481-488

### **An Open Randomized Controlled Trial of Infection Prevention in Child Day-care Centers**

This study evaluates the possibilities for reducing the transmission of infections by an infection prevention program in day-care centers.

Uhari M, Mottonen M. An open randomized controlled trial of infection prevention in child day-care centers. *Pediatric Infectious Disease Journal*. 1999;18:672-677

### **The Role of Child Care in a Community-wide Outbreak of Hepatitis A**

In 1997, a hepatitis A epidemic began in Maricopa County, Arizona. This study determines the source of the epidemic and the role that child care attendance played in sustaining the epidemic among children and adults. <http://pediatrics.aappublications.org/cgi/reprint/108/5/e78.pdf>

Venczel LV, Desai MM, Vertz PD, England B, Hutin YJF, Shapiro CN, Bell BP. The role of child care in a community-wide outbreak of Hepatitis A. *Pediatrics*. 2001;108:78

### **Alternate Child Care, History of Hospitalization, and Preschool Child Behavior**

With more single mothers entering the workforce due to welfare reform efforts, more hospitalized children from single-parent families will have experienced alternate child care arrangements where routine care is provided by adults other than the child's mother. This study investigates with secondary analysis of data whether experience with alternate child care has a moderating effect on the relationship between hospitalization and behavior of preschool children living in female-headed single-parent families.

Youngblut JM, Brooten D. Alternate child care, history of hospitalization, and preschool child behavior. *Nursing Research*. 1999;48:29-34

### **The Politics of Daycare**

This paper examines the sociopolitical circumstances surrounding the formulation, passage in Congress, and presidential veto of the Comprehensive Child Development Act of 1971 (S.1512). In addition, this paper argues that policy is often influenced by several issues that motivate political action; in the case of child care legislation, children are only one factor among many.

Roth W. The Politics of Daycare. *Society*. 1982;19:62-69

### **Negotiation Care: Relationships Between Family Daycare Providers and Mothers**

This article analyzes the relationship between family daycare providers and the mothers who use their services. The article defines the obligations in child care and shares the perspectives of both mothers and providers.

Nelson, MK. Negotiation care: relationships between family daycare providers and mothers. Nelson. *Feminist Studies*. 1989;15:7-33

### **The Ecology of Family Day Care**

The study examined the interrelationships of multiple levels of the family day care system (family, childcare, and children) in order to portray the ecology of family day care in a small midwestern city and surrounding rural areas.

Kontos S. The ecology of family day care. *Early Childhood Research Quarterly*. 1994;9:87-110

### **Measurement of Quality in Childcare Centers**

This study assessed quality of care in 120 child care centers using several major process measures, including the Early Childhood Environment Rating Scale, to evaluate how well the quality of child care is measured by process and regulatable variables.

Scarr S, Eisenberg M, Deater-Deckard K. Measurement of quality in childcare centers. *Early Childhood Research Quarterly*. 1994;9:131-151

### **Parent-caregiver Communication and Quality of Care in Diverse Childcare Settings**

The relationship between parent-caregiver communication and childcare quality was investigated in 12 childcare centers representing different types of sponsorship.

Ghazvini AS, Readdick CA. Parent-caregiver communication and quality of care in diverse childcare settings. *Early Childhood Research Quarterly*. 1994;9:207-222

### **The Potential Health Benefits of Child Day Care**

The child-care setting provides several opportunities to enhance the health of children. This article explains how child care could provide an excellent venue for vision and hearing and lead poisoning screening, for keeping immunization up to date and dental examinations.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/1050-a.pdf>

Randolph LA. The potential health benefits of child day care. *Pediatrics*. 1994;94:1050-1052

### **The Challenge of Day-care Health Among Children with Disabilities**

The special daycare needs of children with disabilities should be met but obstacles exist. This article discusses how daycare providers, parents, and clinicians must form partnerships so that daycare centers can, without undue burden, accommodate disabled children.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/1052.pdf>

Parrino SS, Thacker SB. The challenge of day-care health among children with disabilities. *Pediatrics*. 1994;94:1052-1055

### **Childcare for Children with Special Needs**

Pressure is growing to mainstream disabled children into standard daycare programs under Public Law 99-457. This article discusses the future for children with special needs in child care and includes the guidelines and standards for the care of these children.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/1055.pdf>

Cohen HJ. Childcare for children with special needs. *Pediatrics*. 1994;94:1055-1059

### **Interagency Coordination: The Key to Mainstreaming Children with Special Needs into Day Care**

The focus of this paper is on the realities of mainstreaming day care and preschool opportunities for children with special needs. A review of the history of legislative actions that mandate mainstreaming for children is included. Potential funding sources to cover the actual costs of service are identified. Interagency coordination is emphasized as a cost-effective method to address the interrelated issues of inadequate numbers of staff and appropriate training for staff.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/1059.pdf>

Riley AL. Interagency coordination: the key to mainstreaming children with special needs into day care. *Pediatrics*. 1994;94:1059-1061

### **Health in Child Day Care: The Physician-child-care-provider Relationship**

This paper reviews how increased physician involvement could improve the health situation in child day care and explores ways physicians can become more involved.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/1062.pdf>

Taras HL. Health in child day care: the physician-child-care-provider relationship. *Pediatrics*. 1994;94:1062-1063

### **Child Care in the United States and Industrialized Nations**

This paper explores several themes that shape the nature and quality of child care in industrialized countries. These themes include the political and social contest of child care. In addition, the paper explores the diversity of child care services provided and whether parent choices among child care services are motivated by parental values or by economic or other barriers. The role of quality child care is also examined.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/1081.pdf>

Howes C, Droege K. Child care in the United States and industrialized nations. *Pediatrics*. 1994;94:1081-1083

### **Child Care and Child Health: Use of Population Surveys**

Several studies have examined childhood disease within the context of center-based care. However, most preschool children are not in center-based care. A more general study of the health of children in child care requires an approach that provides data on children in a variety of child-care arrangements and covers a broader age range than that found in most day-care centers. This paper argues that the population-based sample-survey approach to the study of the health in children in child care requires the necessary breadth.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/1096.pdf>

Cain VS. Child care and child health: use of population surveys. *Pediatrics*. 1994;94:1096-1098

### **The Science Behind the American Public Health Association/American Academy of Pediatrics National Health and Safety Guidelines for Child-care Programs**

The rationale and goals are given for the development of *Caring for Our Children - National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care Programs*. This manual was jointly prepared by the American Public Health Association and the American Academy of Pediatrics. <http://pediatrics.aappublications.org/cgi/reprint/94/6/1101.pdf>

Aronson S. The science behind the American Public Health Association/American Academy of Pediatrics National Health and Safety guidelines for child-care programs. *Pediatrics*. 1994;94:1101-1104

### **Training to Ensure Healthy Child Day-care Programs**

This paper discusses the lack of quality training for daycare workers. The paper identifies the obstacles of training and ideas on how training could be improved.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/1108.pdf>

Shapiro-Kendrick A. Training to ensure healthy child day-care programs. *Pediatrics*. 1994;94:1108-1110

### **The Role of the Public Health System in Child Day-care Health**

The Surgeon General, Antonia Novello, MD, discusses the role of the public health system in promoting quality childcare at the International Conference on Child Day Care Health: Science, Prevention, and Practice. <http://pediatrics.aappublications.org/cgi/reprint/94/6/1114.pdf>

Novello AC. The role of the public health system in child day-care health. *Pediatrics*. 1994;94:1114-116

### **A Public Health Perspective on Childcare**

This paper discusses concerns about the quality of child care. The public health system can play a vital role in improving the quality of childcare. This paper suggests different ways child care centers can be improved, for example, providing adequate salaries, training, and appropriate regulatory measures. <http://pediatrics.aappublications.org/cgi/reprint/94/6/1116.pdf>

Gensheimer KF. A public health perspective on childcare. *Pediatrics*. 1994;94:1116-1118

### **Child Day-care Health: Themes, Issues, and Future Directions**

A committee from the International Conference on Child Day Care Health: Science, Prevention, and Practice presents a list of common themes and recommendations from the conference. <http://pediatrics.aappublications.org/cgi/reprint/94/6/1118.pdf>

Goodman RA, Sacks JJ, Aronson SS, Addiss DG, Sharpiro Kendrick A, Osterholm M. Child day-care health: themes, issues, and future directions. *Pediatrics*. 1994;94:1118-1120

### **Early Child Care Experiences and Their Association with Family and Child Characteristics During Middle Childhood**

Long-term correlates of early child care and maternal employment were examined in a representative sample of 333 6- to 12-year-old middle-class children.

Burchinal MR, Landesman Ramey S, Reid MK, Jaccard J. Early child care experiences and their association with family and child characteristics during middle childhood. *Early Childhood Research Quarterly*. 1995;10:33-61

### **Parents as Childcare Consumers**

The childcare related values and quality assessments of parents as childcare consumers were examined. Parents of infants/ toddlers and parents of preschoolers responded to questionnaires, providing both importance and quality ratings for aspects of childcare.

Cryer D, Burchinal M. Parents as childcare consumers. *Early Childhood Research Quarterly*. 1997;12:35-58

### **Toddlers Receiving Early Intervention in Childcare Centers: A Description of a Service Delivery System**

This article presents a descriptive analysis of the early intervention services received by a group of 68 toddler-age children.

Bruder MB, Staff I, McMurrer, Kaminer E. Toddlers receiving early intervention in childcare centers: A description of a service delivery system. *Topics in Early Childhood Special Education*. 1997;17:185-208

### **Reasons for Choosing Childcare: Associations with Family Factors, Quality, and Satisfaction**

Demographic and family process factors related to the reasons mothers selected a particular care arrangement for their 3-year-old children were examined along with the type and quality of care the children received and the mothers' satisfaction with that care.

Peyton V, Jacobs A, O'Brien M, Roy C. Reasons for choosing childcare: associations with family factors, quality, and satisfaction. *Early Childhood Research Quarterly*. 2001;16:191-208

### **The Pediatric Nurse's Role as Health Consultant to a Childcare Center**

An overview of the role of the child care health consultant and a description of a particular case in which a child care center director sought the help of a pediatric nurse to address problems with infection control and illness transmission.

Evers DB. The pediatric nurse's role as health consultant to a childcare center. *Pediatric Nursing*. 2002;28:231-237

### **The Home-daycare Link: Mapping Children's New World Order**

This article summarizes and comments on the six central themes that define the home/day care literature, with the purpose of helping to organize existing knowledge on the home/day care link as well as aid in outlining the future agenda for home/day care ecology research.

Shpancer N. The home-daycare link: mapping children's new world order. *Early Childhood Research Quarterly*. 2002;17:374-392

### **A Prospective Study of Absence for Illness and Injury in Childcare Children**

This population-based study investigated prospectively collected absence episodes to describe patterns and rates of absences for illness and other reasons in two types of formal childcare.

Slack-Smith LM, Read AW, Stanley FJ. A prospective study of absence for illness and injury in childcare children. *Child: Care, Health and Development*. 2002;28:487-494

### **Capturing Parents Understanding About the Health Behaviors They Practice with Their Preschool Aged Children**

This qualitative, descriptive study first explored parents' concept of health and then examined the health practices they undertook for their preschool-aged children.

Roden J. Capturing parents understanding about the health behaviors they practice with their preschool aged children. *Issues in Comprehensive Pediatric Nursing*. 2003;26:23-44

### **Acute Care and Antibiotic Seeking for Upper Respiratory Tract Infections for Children in Day care-Parental Knowledge and Day Care Center Policies**

The objective of this study was to determine both parental and day care-level predictors of acute care and antibiotic seeking for children who attend daycare.

<http://archpedi.ama-assn.org/cgi/reprint/157/4/369.pdf>

Friedman JF, Lee GM, Kleinman KP, Finkelstein JA. Acute care and antibiotic seeking for upper respiratory tract infections for children in day care-Parental knowledge and day care center policies. *Archives of Pediatrics and Adolescent Medicine*. 2003;157:369-374

### **Duration of Breastfeeding, Daycare, and Physician Visits Among Infants 6 Months and Younger**

Although studies have looked at the impact of breastfeeding and daycare attendance on illness, few studies have prospectively examined the impact of daycare and breastfeeding on illness among very young infants. This study describes the association of daycare use and breastfeeding on the probability of a recent physician visit (IRHP) for illness among children <= 6 months. [http://sitemaker.umich.edu/macepid/files/duration\\_of\\_breastfeeding.pdf](http://sitemaker.umich.edu/macepid/files/duration_of_breastfeeding.pdf)

Pettigrew MM, Khodae M, Gillespie B, Schwartz K, Bobo JK, Foxman B. Duration of breastfeeding, daycare, and physician visits among infants 6 months and younger. *Annals of Epidemiology*. 2003;13:431-435

### **Infectious Diseases and Infection Control in Infant-toddler Daycare and Care Centers**

This article provides an overview of the problem of infectious disease outbreaks in infant/toddler daycare centers. The economic costs incurred by the daycare center attendees' families and employers, and the center itself are presented as just one rationale for the implementation of effective infection control programs.

Hutchinson MK. Infectious diseases and infection control in infant-toddler daycare and care centers. *Child and Youth Care Forum*. 1992;21:183-193

### **Childcare Arrangements and Repeated Ear Infections in Young Children**

This study used the 1988 National Health Interview Survey of Child Health to estimate the extent to which being in child care was a risk factor for repeated ear infections, after controlling for demographic and other risk factors. In addition, this data set allowed assessment of various features of child care arrangements, such as group size and hours of attendance. <http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=1694997&blobtype=pdf>

Hardy AM, Fowler MG. Childcare arrangements and repeated ear infections in young children. *The American Journal of Public Health*. 1993;83:1321-1325

### **Infectious Disease in Child Day Care: An Overview**

This article provides an overview of infectious diseases in the daycare setting. The article suggests that future studies must systematically evaluate infectious diseases in child care in order to devise control measures, and take into account factors such as the age of the child and the types of disease agents. <http://pediatrics.aappublications.org/cgi/reprint/94/6/987-a.pdf>

Osterholm MT. Infectious disease in child day care: an overview. *Pediatrics*. 1994;94:987-990

### **Type of Day-care Setting and Risk of Repeated Infections**

This study identifies the types of day-care structures and examines the relationship between the day-care exposure and the risk of repeated infections.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/997.pdf>

Collet JP, Burtin P, Kramer MS, Floret D, Bossard N, Ducruet T. Type of day-care setting and risk of repeated infections. *Pediatrics*. 1994;94:997-999

### **Viral Gastroenteritis in Day-care Settings: Epidemiology and New Developments**

The paper describes some of the epidemiologic features of viral gastroenteritis pathogens in the day-care center (DCC) environment. The four viruses established as the infective agents in outbreaks of diarrheal illness are described.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/999.pdf>

Matson DO. Viral gastroenteritis in day-care settings: epidemiology and new developments. *Pediatrics*. 1994;94:999-1001

### **Surveillance for Transmission of Hepatitis B in Child Day Care**

Twenty-one Seattle daycare centers were evaluated to determine whether there is evidence of horizontal transmission of HBV infections in US day-care facilities.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/1002.pdf>

Foy HM, Swenson PD, Freitag-Koontz MJ, Boase J, Tianji-Yu, Alexander ER. Surveillance for transmission of hepatitis B in child day care. *Pediatrics*. 1994;94:1002-1004

### **Recognition, Investigation, and Control of Communicable-disease Outbreaks in Child Day-Care Settings**

The importance of disease surveillance and outbreak-control activities in child day-care settings has been detailed as part of the American Public Health Association/American Academy of Pediatrics guidelines for out-of-home day-care programs. Aggressive assessment of outbreaks will continue to provide critical information needed to prevent and control diseases and other adverse health events in day-care facilities.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/1004.pdf>

Davis JP, Mac Kenzie WR, Addiss DG. Recognition, investigation, and control of communicable-disease outbreaks in child day-care settings. *Pediatrics*. 1994;94:1004-1006

### **Recovery of Giardia Lamblia Cysts From Chairs and Tables in Child Day-care Centers**

This study examined the transmission of Cysts of *Giardia lamblia* in six Atlanta daycare centers.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/1006.pdf>

Cody MM, Sottnek HM, O'Leary VS. Recovery of *Giardia lamblia* cysts from chairs and tables in child day-care centers. *Pediatrics*. 1994;94:1006-1008

### **The Frequency, Level, and Distribution of Fecal Contamination in Day-care Center Classrooms**

Daycare rooms where infants and toddlers are tended may have widespread contamination by fecal organisms. In two different studies, the infant and toddler care rooms of 38 North Carolina daycare centers were evaluated. <http://pediatrics.aappublications.org/cgi/reprint/94/6/1008.pdf>

Laborde DJ, Weigle KA, Weber DJ, Sobsey MD, Kotch JB. The frequency, level, and distribution of fecal contamination in day-care center classrooms. *Pediatrics*. 1994;94:1008-1011

### **Scabies Outbreak in a Day-care Center**

Described is an outbreak of scabies infestation in a hospital-affiliated child-care facility that ultimately involved the treatment of more than 600 people at a cost of more than \$1,600 and took at least 4 months to eradicate. <http://pediatrics.aappublications.org/cgi/reprint/94/6/1012.pdf>

Sargent SJ, Martin JT. Scabies outbreak in a day-care center. *Pediatrics*. 1994;94:1012-1013

### **The Risks and Benefits of Cytomegalovirus Transmission in Child Day Care**

Cytomegalovirus (CMV) is described along with its effect in child day care.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/1016.pdf>

Dobbins JG, Adler SP, Pass RF, Bale Jr. JF, Grillner L; Stewart JA. The risks and benefits of cytomegalovirus transmission in child day care. *Pediatrics*. 1994;94:1016-1018

### **Meeting the Challenges of Vaccine-preventable Diseases in Child Day Care**

Complete and timely immunization markedly reduces the incidence of disease in young children, especially in the daycare population. The Advisory Committee on Immunization Practices of the U.S. Public Health Service has recently revised its recommended immunization schedule in the light of the availability of new and improved vaccines. However, challenges exist to implementing the program. <http://pediatrics.aappublications.org/cgi/reprint/94/6/1021.pdf>

Cochi SL, Atkinson WL, Adams WG, Dini EF, Gershon AA. Meeting the challenges of vaccine-preventable diseases in child day care. *Pediatrics*. 1994;102:1023

### **Hepatitis Infections in the Day-care Setting**

This paper reviews the current knowledge of the epidemiology and public health importance of hepatitis A and hepatitis B virus in day care centers, current recommendations and prevention measures, areas that need additional research, and the potential for new preventive measures.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/1023.pdf>

Hurwitz ES, Deseda CC, Shapiro CN; Nalin DR, Freitg-Koonz MJ, Hayashi J. Hepatitis infections in the day-care setting. *Pediatrics*. 1994;94:1023-1024

### **Care of Mildly Ill Children in the Day-care Setting**

The need for care for mildly ill children outside of the home has prompted the development of various programs, and states are increasingly devising regulatory guidelines for such programs. However, little research exists about whether the needs of young children with infectious illnesses can be met in a group setting or whether such programs increase disease transmission.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/1024.pdf>

Giebink GS, Chang A, Koch PD, Murray DL, Gonzalez GD. Care of mildly ill children in the day-care setting. *Pediatrics*. 1994;94:1024-1026

### **Absence From Childcare for Respiratory Illness**

This population-based study investigated prospectively collected absence for respiratory illness data in 2 types of formal childcare (centre day care and family day care) in Perth, Western Australia, and factors associated with such absence.

Slack-Smith LM, Read AW, Stanley FJ. Absence from childcare for respiratory illness. *Child: Care, Health and Development*. 2004;30:29-37

### **High Prevalence of Multidrug-resistant Streptococcus Pneumoniae Among Children in a Rural Kentucky Community**

An investigation was conducted to determine the prevalence of nasopharyngeal carriage of drug-resistant *S. pneumoniae* among children in a rural Kentucky community.

Duchin JS, Breiman RF, Diamond A, Lipman HB, Block SL, Hedrick JA, Finger R, Elliott JA. High prevalence of multidrug-resistant *Streptococcus pneumoniae* among children in a rural Kentucky community. *International Journal of Pediatric Otorhinolaryngology*. 1996;36:80

### **Influenza A Vaccine Decreases the Incidence of Otitis Media in 6- to 30-month-old Children in Day Care**

The objective of this study was to determine if the use of influenza vaccine in children in day care decreases the incidence of otitis media during the influenza season.

Clements DA, Langdon L, Bland C, Walter E. Influenza A vaccine decreases the incidence of otitis media in 6- to 30-month-old children in day care. *Archives of Pediatrics and Adolescent Medicine*. 1995;149:1113-1117

### **A Pacifier Increases the Risk of Recurrent Acute Otitis Media in Children in Day Care Centers**

This objective of this study was to follow up on a previous retrospective analysis in which the use of a pacifier was found to be a risk factor for recurrent acute otitis media.

<http://pediatrics.aappublications.org/cgi/reprint/96/5/884.pdf>

Niemela M; Uhari M; Mottonen M. A pacifier increases the risk of recurrent acute otitis media in children in day care centers. *Pediatrics*. 1995;96:884-888

### **Respiratory Infections in Day Care**

This review examines the role of day care in the occurrence of respiratory tract infections. In addition to summarizing data on the most common conditions – upper respiratory tract infections and otitis media – the less common, but potentially growing, problems of tuberculosis and antimicrobial resistance. Finally, an approach to the prevention of respiratory infections in children who attend day care is presented and research needs are identified.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/1018.pdf>

Schwartz B, Giebink GS, Henderson FW, Reichler MR; Jereb J, Collet J. Respiratory infections in day care. *Pediatrics*. 1994;94:1018-1020

### **Influence of Attendance at Day Care on the Common Cold From Birth Through 13 Years of Age**

This study describes the trends in the occurrence of the common cold during the first 13 years of life among children who attended different childcare settings early in life.

<http://archpedi.ama-assn.org/cgi/reprint/156/2/121.pdf>

Ball TM, Holberg CJ, Aldous MB, Martinez FD, Wright AL. Influence of attendance at day care on the common cold from birth through 13 years of age. *Archives of Pediatric and Adolescent Medicine*. 2002;156:121-126

### **Injuries to Preschool Children and Infection Control Practices in Childcare Programs**

This survey examined rate, type, and extent of injuries in centers and the infection control practices employed by staff.

Waibel R, Misra R. Injuries to preschool children and infection control practices in childcare programs. *Journal of School Health*. 2003;73:167-172

### **Comparative Intervention Study Among Danish Daycare Children: The Effect on Illness of Time Spent Outdoors**

The purpose of the study was to examine the correlation between illnesses, and in particular contagious illnesses, among daycare children and the amount of time spent outdoors, and whether through the intervention of increasing the amount of time spent outdoors it is possible to lower the incidence of illness.

Mygind O, Ronne T, Soe AL, Henrik Wachmann C, Ricks P. Comparative intervention study among Danish daycare children: the effect on illness of time spent outdoors. *Scandinavian Journal of Public Health*. 2003;31:439-433

### **Day Care Attendance in the First Year of Life and Illnesses of the Upper and Lower Respiratory Tract in Children With a Familial History of Atopy**

The objective of this study was to examine the relationship between day care attendance and illnesses of the upper and lower respiratory tract in the first year of life.

<http://pediatrics.aappublications.org/cgi/reprint/104/3/495.pdf?ck=nck>

Celedon JC, Litonjua AA, Weiss ST, Gold DR. Day care attendance in the first year of life and illnesses of the upper and lower respiratory tract in children with a familial history of atopy. *Pediatrics*. 1999;104:495-500

### **Experience of Respiratory and Allergic Illness in Children Attending Childcare**

This study describes previous illness for children attending two types of formal child care (130 family daycare homes and 11 child daycare centers).

Slack-Smith LM, Read AW, Stanley FJ. Experience of respiratory and allergic illness in children attending childcare. *Child: Care, Health and Development*. 2002;8:171-177

### **Use of Xylitol Chewing Gum in Daycare Centers: A Follow-up Study in Savonlinna, Finland**

The use of toothbrushes in daycare centers has been questioned because of the possibility of infections spreading through unsupervised brushing. Several field studies have demonstrated a caries-preventive effect of xylitol chewing gum – a measure that could be a practical way of taking care of oral hygiene during daycare hours without brushing. A community trial was conducted in Savonlinna, Finland to test the caries-preventive effect of xylitol chewing gum at these centers.

Kovari H, Pienihakkinen K, Alanen P. Use of xylitol chewing gum in daycare centers: a follow-up study in Savonlinna, Finland. *Acta Odontologica Scandinavica*. 2003;61:367-370

### **Effects of Child Care on Psychological Development: Issues and Future Directions for Research**

Many opportunities for researching the effects of childcare on children's psychological development remain to be explored. New methodologies must be developed to examine the complex relationships among quality of daycare, the individual child's personality, and family variables. <http://pediatrics.aappublications.org/cgi/reprint/94/6/1069.pdf>

Friedman SL, Brooks-Gunn J, Vandell D, Weinraub M. Effects of child care on psychological development: issues and future directions for research. *Pediatrics*. 1994;94:1069-1070

### **The Impact of Daycare Environments on Children's Mood and Behavior**

This study examined the influence of different environmental features at nine daycare centers on children's emotions in relation to their individual traits.

Laike T. The impact of daycare environments on children's mood and behavior. *Scandinavian Journal of Psychology*. 1997;38:209-218

### **Mental Health Consultations in the Preschool Daycare Center**

This article explores some of the challenges to children's emotional and social development inherent in the all-day childcare programs for children aged 3 to 5 years. The psychoanalytically-oriented child development community has offered ongoing assistance, information, and support to teachers, parents, and children in preschools and preschool daycare sites in a number of communities across the country. The process and results of a long-term preschool daycare consultation are presented.

Nelson MS. Mental health consultations in the preschool daycare center. *Child Adolesc Psychiatr Clin N Am*. 2001;10:45-53

### **Teachers' and Parents' Reports on 3- to 6-year-old Children's Sexual Behavior - A Comparison**

The main purpose of the study was to compare observed range and frequency of sexual behavior in 3- to 6-year-olds in two different environments: the home and the daycare center. The study also aimed to investigate parental and staff opinions on child sexual behavior.

Larsson I, Svedin CG. Teachers' and parents' reports on 3- to 6-year-old children's sexual behavior—a comparison. *Child Abuse and Neglect*. 2002;26:247-266

### **Cortisol Levels of Young Children in Full-day Childcare Centers: Relations with Age and Temperament**

Cortisol levels of 70 children, aged 39-106 months, were sampled at home and at their full-day childcare centers at two times of day, mid-morning and mid-afternoon. Parents and teachers completed questionnaires assessing child temperament (negative affectivity, self-confidence or extroversion, and effortful control) and aggressive behavior.

Dettling AC, Gunnar MR, Donzella R. Cortisol levels of young children in full-day childcare centers: relations with age and temperament. *Psychoneuroendocrinology*. 1999;24:519-536

### **Quality of Care and Temperament Determine Changes in Cortisol Concentrations Over the Day for Young Children in Childcare**

The current study investigated whether patterns of cortisol production in preschool-aged children in group care were influenced by characteristics such as group size, adult:child ratio, separation from family/parents; and quality of attention and stimulation from the childcare provider.

Dettling AC, Parker SW, Lane S, Sebanc A, Gunnar MR. Quality of care and temperament determine changes in cortisol concentrations over the day for young children in childcare. *Psychoneuroendocrinology*. 2000;25:819-836

### **Rising Cortisol at Childcare: Relations with Nap, Rest, and Temperament**

This study measured cortisol in children and observed an unexpected rise in cortisol across the day, in full-day, center-based childcare.

Watamura SE, Sebanc AM, Gunnar MR. Rising cortisol at childcare: relations with nap, rest, and temperament. *Developmental Psychobiology*. 2002;40:33-42

### **Injuries in Child Day Care: An Overview**

This article discusses the incidence of injuries, risk factors, and injury-control efforts in child day care. <http://pediatrics.aappublications.org/cgi/reprint/94/6/1031-a.pdf>

Rivara FP, Sacks JJ. Injuries in child day care: an overview. *Pediatrics*. 1994;94:1031-1033

### **Daycare Injuries in the Database of the Canadian Hospitals Injury Reporting and Prevention Program**

The Canadian Hospitals Injury Reporting and Prevention Program provides data about children's injuries in daycare centers that can be used to make recommendations for preventative measures. <http://pediatrics.aappublications.org/cgi/reprint/94/6/1041.pdf>

Mackenzie SG, Sherman GJ. Daycare injuries in the database of the Canadian Hospitals Injury Reporting and Prevention Program. *Pediatrics*. 1994;94:1041-1043

### **Injuries in Child-care Centers: Rates, Severity, and Etiology**

Researchers analyzed data from a survey of 141 children attending four daycare centers in the San Francisco area to investigate the rate, severity, and etiology of preschoolers' injuries.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/1043.pdf>

Alkon A, Genevro JL, Kaiser PJ, Tschann, JM, Chesney M, Boyce WT. Injuries in child-care centers: rates, severity, and etiology. *Pediatrics*. 1994;94:1043-1046

### **American Public Health Association/American Academy of Pediatrics Injury Prevention Standards**

This article provides a perspective from the United States and European countries and includes a discussion of standards from the American Public Health Association and the American Academy of Pediatrics publication.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/1046.pdf>

Lie L, Runyan CW, Petridou E, Chang A. American Public Health Association/American Academy of Pediatrics Injury Prevention Standards. *Pediatrics*. 1994;94:1046-1048

### **Children's Deaths at Day-care Facilities**

The objective of this study was to demonstrate the usefulness of death-investigation records as a means of identifying and characterizing the types of deaths that occur among children while attending day care facilities.

<http://pediatrics.aappublications.org/cgi/reprint/94/6/1039.pdf>

Good SE, Gibson Parrish R, Ing RT. Children's deaths at day-care facilities. *Pediatrics*. 1994;94:1039-1041

### **Connecticut's New Comprehensive and Universal Early Childhood Health Assessment Form**

This article describes how new legislation in Connecticut has established a state-wide pre-kindergarten program, thus allowing the opportunity to develop a comprehensive early childhood health assessment form. <http://www.healthychildcare.org/pdf/CrowleySH.pdf>

Crowley A, Whitney G. Connecticut's New Comprehensive and Universal Early Childhood Health Assessment Form. *Journal of School Health*. 2005;75:281-285

### **Pesticide Measurements From the First National Environmental Health Survey of Child Care Centers Using a Multi-residue GC/MS Analysis Method**

The U.S. Department of Housing and Urban Development, in collaboration with the U.S. Consumer Product Safety Commission and the U.S. Environmental Protection Agency, characterized the environments of young children (<6 years) by measuring lead, allergens, and pesticides in a randomly selected nationally representative sample of licensed institutional child care centers.

Tulve NS, Jones PA, Nishioka MG, Fortmann RC, Croghan CW, Zhou JY, Fraser A, Cavel C, Friedman W. Pesticide measurements from the first national environmental health survey of child care centers using a multi-residue GC/MS analysis method. *Environmental Science & Technology*. 2006;40:6269-6274

### **The Risk of Infectious Diseases Among Child Care Providers**

This paper reviews the literature on the risk of infectious diseases in child care providers in the United States. The focus is on center-based child care as opposed to family or in-home care.

Cordell RL. The risk of infectious diseases among child care providers. *J Am Med Womens Assoc*. 2001;56:109-112

### **The Public Health Perspective on Infectious Disease Aspects of the Revised Standards for Health and Safety in Out-of-home Child Care**

This article reviews some of the major additions to and changes in the 2002 edition of *Caring for Our Children: National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care Programs* that deal with health promotion and protection in child care and infectious diseases. It discusses the rationale for the changes and some of those areas that remain unresolved.

Cordell RL. The public health perspective on infectious disease aspects of the revised standards for health and safety in out-of-home child care. *Pediatr Ann*. 2002;31:307-312

### **Age of Entry to Day Nursery and Allergy in Later Childhood**

This study investigates whether children who attend a nursery at a young age have a lower rate of atopy and fewer allergies than children who attend from an older age.

Kramer U, Heinrich J, Wjst M, Wichmann HE. Age of entry to day nursery and allergy in later childhood. *Lancet*. 1999;353:450-454

### **Group Day Care and the Risk of Serious Infectious Illnesses**

This case-control study was undertaken to assess the association between group day care attendance and serious infectious illnesses (defined by the medical need for hospitalization) in preschool children.

Berg AT, Shapiro ED, Capobianco LA. Group day care and the risk of serious infectious illnesses. *Am J Epidemiol*. 1991;133:154-163

### **Contemporary Pediatric Practice: In Support of Infant Mental Health (Imaging and Imagining)**

Developmental biologists, the media, and policymakers are awakening to a confluence of evidence that links the early brain development of human infants with their social experience in primary relationships. New biotechnology offers dynamic insights into the interdependence between social-emotional development and the expression of an individual's biobehavioral genetic code.

Gorski PA. Contemporary pediatric practice: in support of infant mental health (imaging and imagining). *Infant Mental Health Journal*. 2001;22:188-200

### **The Health of Latino Children: Urgent Priorities, Unanswered Questions, and a Research Agenda**

The Latino Consortium of the American Academy of Pediatrics Center for Child Health Research identified the most urgent priorities and answered questions on Latino child health. This article discusses research and methodologic issues, disproportionate disease burden and associated risk factors, cultural and linguistic considerations, workforce issues, and health care access and quality. <http://jama.ama-assn.org/cgi/reprint/288/1/82.pdf>

Flores G, Fuentes-Afflick E, Barbot O, et al. The health of Latino children: urgent priorities, unanswered questions, and a research agenda. *Journal of the American Medical Association*. 2002;288:82-90

### **Counseling parents on Infant Day Care: How to do it Effectively**

Parents frequently turn to healthcare providers with questions about day care for their infant, but there are no simple, absolute answers. This article reviews four areas that should be discussed and the controversies within each area. Parents ask four questions: 1) should I go back to work? 2) how will my working affect my baby? 3) what kind of care is available? and 4) what do I look for in good care?

Youngblade LM, Carter C. Counseling parents on infant day care: how to do it effectively. *Contemporary Pediatrics*. 2004; 21: 54-72

### **More than a Work Support? Issues Around Integrating Child Development Goals into the Child Care Subsidy System**

The goal of this article is to examine the issues that must be considered if policymakers wish to build upon the unique strengths of the subsidy system and to help it move beyond the goal of supporting parental work to also emphasize child development. This article describes current approaches to child care subsidies, and identifies some of the issues that can challenge efforts to better support the development of low-income children in the child care subsidy system. In particular, the article highlights some questions and issues that policymakers, practitioners, and researchers in the child care field might want to debate and explore as they work to identify ways to better meet the needs of low-income children and families.

[http://www.urban.org/UploadedPDF/1000449\\_ECRQtrly.pdf](http://www.urban.org/UploadedPDF/1000449_ECRQtrly.pdf)

Adams G, Rohacek M. More than a work support? Issues around integrating child development goals into the child care subsidy system. *Early Childhood Research Quarterly*. 2002;17:418-440

### **Caring for Children of Color: The Child Care Patterns of White, Black, and Hispanic Children Under Five**

This report uses combined 1997 and 1999 data from the National Survey of America's Families (NSAF) to investigate the child care patterns of white, black, and Hispanic children.

[http://www.urban.org/UploadedPDF/311285\\_OP-72.pdf](http://www.urban.org/UploadedPDF/311285_OP-72.pdf)

Capizzano J, Adams G, Ost J. *Caring for children of color: the child care patterns of White, Black, and Hispanic children under five*. Washington, DC: The Urban Institute; 2006. Occasional Paper Number 72

### **Health Disparities and Gaps in School Readiness**

The author documents pervasive racial disparities in the health of American children and analyzes how and how much those disparities contribute to racial gaps in school readiness.

[http://www.futureofchildren.org/usr\\_doc/pg\\_117\\_currie.pdf](http://www.futureofchildren.org/usr_doc/pg_117_currie.pdf)

Currie, J. Health disparities and gaps in school readiness. *The Future of Children*. 2005;15:117-138

### **Act Up, Calm Down: Mental Health Consultants for Preschools Surprise with Their Success**

States have experimented with placing mental health experts in preschool classrooms for about a decade, uncertain of the real effect. This article shares the results of a first-in-the-nation study of 43 Connecticut preschools, which suggests such measures really work.

[http://www.ct.gov/dcf/lib/dcf/latestnews/act\\_up\\_calm\\_down.pdf](http://www.ct.gov/dcf/lib/dcf/latestnews/act_up_calm_down.pdf)

Waldman H. Act up, calm down: mental health consultants for preschools surprise with their success. *Hartford Courant*. 2007

### **Child Care Health Consultation Programs: Barriers and Recommendations**

The objective of this study was to provide insight for the development of current and future child care health consultation programs by describing the barriers identified by Child Care Health Consultants (CCHCs) related to program implementation in 20 California counties.

<http://www.healthychildcare.org/pdf/Child%20care%20health%20consultation%20programs.pdf>

Farrer J, Alkon A, To K. Child care health consultation programs: barriers and recommendations. *Maternal and Child Health Journal*. 2006;11:111-118

### **The Recovery Divide: Poverty and the Widening Gap Among Mississippi Children and Families Affected by Hurricane Katrina**

This study conducted an assessment among Mississippi residents displaced or heavily impacted by Hurricane Katrina. The purpose of the study was to gather information that could inform local, state, and federal policymakers about the health and social service needs of displaced and impacted populations living in transitional community-based settings, such as trailer parks, and in community settings that have been heavily damaged or destroyed by the hurricane.

[http://www.ncdp.mailman.columbia.edu/files/The%20Recovery%20Divide\\_Full%20Report.pdf](http://www.ncdp.mailman.columbia.edu/files/The%20Recovery%20Divide_Full%20Report.pdf)

Abramson D, Garfield R, Redlener I. *The recovery divide: poverty and the widening gap among Mississippi children and families affected by Hurricane Katrina*. New York, NY: Columbia University National Center for Disaster Preparedness; 2007

### **Opportunities for Health Promotion Education in Child Care**

The objectives of the study were to understand the attitudes toward, barriers to, and strategies for incorporating health promotion activities in child care settings as well as topics that are deemed most useful from the perspectives of parents, child care directors, and health consultants.

<http://pediatrics.aappublications.org/cgi/reprint/116/4/e499.pdf>

Gupta R, Shuman S, Taveras E, Kulldorff M, Finkelstein J. Opportunities for health promotion in child care. *Pediatrics*. 2005;116:499-505

### **Improving the Health and Safety of Children in Nonparental Early Education and Child Care**

The article discusses demographic information, infection, injury, and the importance of quality. Additionally, the article includes key sections on the effects of child care on development, how pediatricians can get involved, making child care arrangement decisions, accommodating children with special health care needs, and finally, discusses opportunities for health promotion.

<http://www.healthychildcare.org/pdf/aronsonshopepeds.pdf>

Aronson S, Shope T. Improving the health and safety of children in nonparental early education and child care. *Pediatrics in Review*. 2005;26:86-95

### **State Policies Regarding Nursing Delegation and Medication Administration in Child Care Settings: A Case Study**

This case study explored the development of state statutes and regulations for medication administration training of child care providers in the state of Connecticut, nursing liability issues related to the definition of this activity, and the role of the Connecticut State Board of Examiners for Nursing. <http://www.healthychildcare.org/pdf/CrowleyMed.pdf>

Heschel R, Crowley A, Cohen S. State policies regarding nursing delegation and medication administration in child care settings: a case study. *Policy Politics Nursing Practice*. 2005;6:86-98

### **Gaps in Pediatricians' Advice to Parents Regarding Early Childhood Aggression**

Pediatricians appear to take a limited approach to counseling parents of children with hurtful behavior. To increase health care providers' role in violence prevention, more systematic efforts are needed to increase rates of screening for early childhood aggression and to broaden the scope of how pediatricians counsel parents. <http://cpj.sagepub.com/cgi/reprint/45/1/23.pdf>

Scholer S, Nix R, Patterson B. Gaps in Pediatricians' Advice to Parents Regarding Early Childhood Aggression. *Clinical Pediatrics*. 2006;45:23-28

### **Knowledge and Beliefs About Guidelines for Exclusion of Ill Children From Child Care**

The objective of this article was to compare parents', pediatricians', and center-based child care providers' knowledge and beliefs about exclusion practices. The survey found that child care providers were more likely than pediatricians to believe that exclusion was warranted to control infection, or for the child's personal needs.

<http://www.healthychildcare.org/pdf/articleCopeland.pdf>

Copeland K, Duggan A, Shope T. Knowledge and beliefs about guidelines for exclusion of ill children from child care. *Ambulatory Pediatrics*. 2005;5:365-371

### **State Child Care Regulations Regarding Infant Sleep Environment Since the Healthy Child Care America - Back to Sleep Campaign**

The objective of this study was to evaluate the effectiveness of the first 2 years of the Healthy Child Care America Back to Sleep Campaign in improving child care regulations.

<http://pediatrics.aappublications.org/cgi/reprint/118/1/73.pdf>

Moon RY, Aird L, Kotch L. State child care regulations regarding infant sleep environment since the Healthy Child Care America - Back to Sleep Campaign. *Pediatrics*. 2006;118:73-83

### **Sudden Infant Death Syndrome in Child Care Settings**

The article details the incidence of SIDS in Child Care, and explores the reasons that the proportion of SIDS cases that occur in child care is higher than it should be.

<http://pediatrics.aappublications.org/cgi/reprint/106/2/295.pdf>

Moon RY, Patel KM, Schaefer SJM. Sudden infant death syndrome in child care settings. *Pediatrics*. 2000;106:295-300

### **Infant Sleep Position Policies in Licensed Child Care Centers After Back to Sleep Campaign**

The objective of this study was to determine the effectiveness of the Back to Sleep Campaign, particularly in child care settings. The study examined both awareness of AAP safe sleep policy, as well as implementation of the policy.

<http://pediatrics.aappublications.org/cgi/reprint/106/3/576.pdf>

Moon RY, Biliter WM. Infant sleep position policies in licensed child care centers after back to sleep campaign. *Pediatrics*. 2000;106:576-580

### **Hand-Washing and Diapering Equipment Reduces Disease Among Children in Out-of-Home Child Care Centers**

The objective of this study was to determine whether the installation of equipment for diaper-changing, hand-washing, and food preparation that is specifically designed to reduce the transmission of infectious agents would result in a decrease in the rate of diarrheal illness among children and their teachers in child care centers.

<http://pediatrics.aappublications.org/cgi/reprint/120/1/e29.pdf>

Kotch JB, Isbell P, Weber DJ, Nguyen V, Savage E, Gunn E, Skinner M, Fowlkes S, Virk J, Allen J. Hand-washing and diapering equipment reduces disease among children in out-of-home child care centers. *Pediatrics*. 2007;120:29-36