

What Health Professionals Can Do to Reduce Illness from Infection in Early Education/Child Care and Schools

Many children are enrolled in group settings from infancy. These settings include informal neighborhood arrangements, more organized group care in home-based settings, center-based early education programs, and schools for older children. Aggregation in groups increases the risk of the spread of infectious diseases, but it also offers opportunities to collaborate with educators for health promotion and prevention. National statistics show that children who are enrolled in group care settings have a higher rate of immunization than those who do not participate in such arrangements.

Health professionals can help families and educators manage infectious diseases in early education/child care and schools in the following ways.

Know Where Children Spend Time Away from Home:

Determine and make sure you understand the current care arrangements for each child for whom you provide medical care. Parents/legal guardians may move children from relative care to nonrelative, home-based family child care arrangements to center-based programs and back again in the same day or on different days each week, or change arrangements for a variety of reasons. Before- and afterschool programs are used by many families and may be recreational, educational, or minimally supervised. Drop-in child care is now offered in many fitness centers or health clubs, bowling alleys, shopping malls, and other locations. The names of the programs do not necessarily describe the type of care.

Support Breastfeeding:

Support mothers who are breastfeeding their babies, and endorse breastfeeding as an important preventive health care strategy. Research shows that breast milk, with its unique mixture of fatty acids, lactose, amino acids, vitamins, minerals, enzymes, and other components, helps protect infants from illness. Provide families with extra information about storage and handling of breast milk to share with their child care providers. Foods sent from home or made in the education facility should follow the guidelines of the U.S. Department of Agriculture Child and Adult Care Food Program which specifies types of foods and portions to be offered.

Keep good immunization and routine health assessment records:

Implement reminder/recall systems to ensure each child is age-appropriately immunized and up-to-date with all preventive care services. Participate in any online immunization registry that exists for your

location at the state or municipal level. Encourage family members of children in child care to be up to date with their vaccines. Welcome discussion of concerns about use of the recommended immunization schedules for children and adults who care for children. Schedule visit time to discuss any vaccine related concerns using the approaches recommended by the CDC to respond to misconceptions. Coordinate to ensure consistent and effective approaches to vaccine refusers by health care providers and educators in community, early education/child care and school programs. Consistent motivational approaches are most likely to increase acceptance of recommended vaccine schedules. (See <https://www.cdc.gov/vaccines/hcp/conversations/prevent-diseases/>)

Remind family members when and how to practice routine hand hygiene:

Key times are on arrival and when leaving the early education/child care facility, and when arriving at home. Hand washing with soap and water is best. The child and the child's family members have increased exposure to infectious diseases as they come and go in the group care setting. Explain that the first year of group care may increase the frequency of respiratory illness by 1-2 episodes more than what children experience in that same period if cared for only at home without other children around. For infants, the usual frequency of 6-8 respiratory infections in the first year may increase to 7 to 10 such illnesses. Although frequency of illness may increase when in the group setting, severity will likely not change and remain mild.

Provide management instructions for children who are ill:

Provide instructions not only to families but also to teachers/caregivers who are responsible for observing for illness and giving treatment to children at any time during the day. Teachers/caregivers should not be expected to rely on relayed health care communications from families. Even though family members may understand the instructions, they do not necessarily share that information effectively with others who care for their child.

Help develop a plan for care of children with special needs:

These plans should address chronic or acute infections and at-risk children. Provide these care plans in writing to all teachers/caregivers involved in the child's care. Where the child's care plan includes special procedures, such as administering albuterol treatments for asthma, arrange for all the child's teachers/caregivers to learn from a health professional how to perform these procedures. As with communicating management instructions, parents/legal guardians who may know how to perform health care procedures may not have the teaching skills to instruct others who care for their child to perform the procedures correctly.

Provide educational sessions about health for families and teachers/caregivers:

Lesson plans, handouts and visual aids for such teaching are available from websites that support child care health consultants and offer self-learning modules for educators: e.g. The California Childcare Health Program <https://cchp.ucsf.edu> (- in English, Spanish and other languages), the PA Chapter of the American Academy of Pediatrics Early Childhood Education Linkage System (www.ecelshealthychildcarepa.org), and some of the American Academy of Pediatrics' (AAP) websites. The AAP's Healthy Children website has content that parents and staff members can read or listen to a narrator read to them in English and Spanish (www.healthychildren.org); the Healthy Futures pages on the Healthy Child Care America website has curricula with key reference materials, PowerPoint files and video segments that health professionals can use to teach health and safety workshops. Also, this website has links to a few self-learning modules that educators can use. (<http://healthychildcare.org/HealthyFutures.html>). Teach families, directors and teachers/caregivers about appropriate inclusion and exclusion practices for infectious diseases in the group setting.

Explain to women of child bearing age how care for young children exposes them to infection:

Of special concern are those that can be harmful to a fetus such as cytomegalovirus (CMV) and parvovirus. CMV is the leading cause of congenital infection in the United States. Approximately 1% of live-born infants are infected prenatally with CMV. While most infected fetuses do not have any illness or disability, 10-20% of infected fetuses have hearing loss, significant developmental delay, cerebral palsy and/or vision loss. Fetal infection can occur during the pregnancy of women who have not had CMV before or in women who had CMV before but have been exposed to a different strain of this virus.

CMV infection is very common among children less than 3 years of age. These are mostly children who are infected with CMV infection after birth, not prenatally. In this age group, 40-70% of children in early education and child care have this virus in their saliva, urine and blood. Most have no symptoms of the infection. The spread of CMV by young children drops to much lower levels by the time children are 5 years old. The risk of fetal infection from CMV spread by young children is greatest for teachers/caregivers of infants and toddlers. The risk is less, but also of concern for mothers who become pregnant, and already have infants or toddlers enrolled in early education and child care. These mothers are more likely to be infected with CMV viruses brought home as a consequence of the child's participation in early education and child care than those mothers whose children receive care only at home.

Reduction of the risk of fetal infection with CMV depends on three approaches: 1) having teachers/caregivers use Standard Precautions with special emphasis on consistent practice of hand hygiene after any contact with a body fluid or object that might have body fluid on it and 2) having women who are trying to get pregnant or who are in early pregnancy temporarily care for older age

children or work at tasks that do not involve exposure to the body fluids of young children.3) Educating families with a young child in a group care setting about using conscientious hand hygiene at home to reduce the risk of spread of CMV from the child to other family members.

Help determine what levels of illness each child care program and school can manage:

This will depend on the severity of the illness and available personnel and other resources.

Sensitively respond to questions asked by families and teachers/caregivers:

Discussions about the implications of infectious diseases for children's participation in a group care setting should avoid suggesting that a patient's participation in a group care setting is necessarily the source of a particular infectious illness. Community and family exposure, as well as exposure in a group care setting, are all potential sources of an infectious disease.

Families need to know that group care increases the risk of mild illness, especially in the first year of care. However, be cautious about making negative comments to families about the care arrangement they have chosen for their child. Such comments may cause families to feel guilty about their decision when the benefits of group care for the child and family may outweigh the burden of slightly increased number of episodes of common illness.

Suggest that families see if their child's program is rated in a state quality rating improvement system that measures overall program quality. Mention that preventive measures might help, such as frequent and careful hand hygiene for children and staff members, following recommended practices in diapering and toileting areas, and appropriate ventilation of rooms.

Inquire about whether the facility has access to a health consultant who might be available to assess the program's operation to see whether any additional measures can help reduce the risk of infection. The national standards in [Caring for Our Children](#), recommend that all group care settings have health professional input that involves periodic site visits to make observations, provide needed advice and professional development for staff members, as well as access for questions from staff members at other times. Programs for infants and toddlers should be visited monthly; those for preschool age children should be visited at least quarterly. National school health standards recommend comparable health professional input and planning for all school programs.

Use antibiotics in accordance with current recommended practices:

Many families and early education staff are not aware of changes in recommendations to avoid using antibiotics for the common cold, non-specific cough, ear infections or sore throats without evidence that bacteria are causing these problems. They may need to be educated about how treatment with antibiotics contributes to the development of resistant bacteria. They may erroneously believe that antibiotics will shorten their child's illness.