

Little things

that matter

Common Infections Contracted in Child Care and Schools

Jordan Hsu, M.D.

Of the over 20 million children less than 5 years of age in the United States, about one half attend some child care facility. Of those children over 5 years of age, over 50 million attend school from kindergarten through the 12th grade. Due to the increased exposure to other children in these environments, children in child care facilities (and schools) are at an increased rate of contracting infectious diseases.

Factors that may increase the risk of introduction and transmission of infections in child-care settings include the personal hygiene and health status of both the workers and the children in the environment as well as the actual condition of the facility. Child care center policies which would include guidelines on food-handling, hand-washing, and ratio of providers to children may also affect the potential spread of infections. Common modes of transmission of infections include respiratory routes, fecal-oral routes, and direct contact with body fluids or blood. Other possible infectious sources include any animals that may be present at a given facility.

Respiratory illnesses due to viral pathogens are very common in childcare facilities. Common infections are caused by parainfluenza, rhinoviruses, coronaviruses, influenza, and respiratory syncytial virus (RSV). Many of these respiratory viruses present initially as a typical cold, often with fever. Treatment includes suctioning of nasal passages with administration of saline drops/spray, using humidified air, elevating the head while sleeping, controlling fever for comfort, and encouraging rests and fluids. Despite these measures, younger children who may be exposed repeatedly to respiratory viruses during the fall and winter months may develop ear infections, sinus infection, or possibly pneumonia.

Influenza or "the flu" is typically characterized by high fever, cough, runny nose, body aches, chills, headaches, and nausea. As with other respiratory viruses, the body's immune system tries to fight off the flu, but complications including ear infections, pneumonia, wheezing, and dehydration may develop. Typically RSV infections affect infants and young children first with upper respiratory/cold symptoms which may then lead to wheezing. Initial treatment for both the flu and RSV is similar for other respiratory viruses.

Prevention in the spread of respiratory infections in these settings focuses primarily on good hand hygiene.

(Continued on page 2)

IN THIS ISSUE

Car Seat Safety	3
Basic Training: Kids & Teens Getting Fit	3
Research Corner	3
Health Care Questions	4

Insurance Note

With the end of the year nearing, many families may have met their insurance deductible. If this is the case, please ask your insurance company for documentation that you may bring to the office as proof. Otherwise, some form of payment may be required until proof of reaching the deductible is obtained.

(Continued from page 1)

Steps include washing hands with soap and water, particularly when they are visibly soiled. Although alcohol based antiseptic/hand wash is acceptable, thorough hand washing is just as effective, and often more effective if the hands are visibly soiled. Teaching staff and children to sneeze or cough into the elbow (not the hands) and maintaining a clean environment will also help prevent the spread of infection. This would entail routine safe cleaning and disinfecting of environmental surfaces. Children with fever should be excluded from childcare/school until they are fever free for at least 24 hours and are able to participate in their usual activities.

For most common respiratory illnesses, no specific preventative or prophylactic treatment is available with the exception of RSV and influenza. For high-risk infants and young children who are at risk for severe disease and potential hospitalization from RSV, a monthly injection of an antibody to RSV may be recommended. Risk factors for severe disease include the following: children less than 2 years of age WITH chronic lung disease of prematurity that required medical intervention within 6 months of the RSV season, children with significant congenital heart disease, high-risk infants born less than 32 weeks of age, and infants born between 32 and 35 weeks of age with several risk factors.

The primary preventative measure for influenza is the influenza vaccine, which can be given to any child older than 6 months who does not have any significant egg allergy, severe neurologic disorder, nor any prior history of allergy to any component of the influenza vaccine. In certain circumstances, antiviral medications may be recommended for prevention of influenza in exposed high risk patients (e.g., those with asthma, diabetes, congenital heart disease). With these high-risk patients, it is also highly recommended that family members be vaccinated for influenza.

Gastrointestinal illness is also very common in childcare facilities. These pathogens are spread by the fecal-oral route, either by direct person-to-person spread or indirectly via contaminated surfaces or food. Another potential source could be from any pets/animals in the room.

One of the most common gastrointestinal illnesses worldwide is caused by rotavirus. The vast majority of kids in the United States have had a rotavirus infection by the age of 3. Rotavirus is easily transmitted in child-

care facilities, presumably via the fecal-oral route, as well as through some respiratory secretions. Symptoms of rotavirus infection include fever, abdominal cramping, vomiting, and diarrhea. Treatment is primarily supportive which includes fever control, rest, and oral rehydration. Specific emphasis should be placed on observing the child for signs of dehydration or any bloody vomiting or diarrhea that may be indicative of other medical conditions. In severe cases, intravenous fluids and/or hospitalization may be required.

Prevention in the spread of rotavirus as well as other gastrointestinal illness should focus on good hand washing particularly when handling/preparing food, after changing diapers, or when transitioning to the care of another child. Disinfecting contaminated surfaces should also be routine. Furthermore, any child with viral gastrointestinal illness generally should be excluded from childcare/school until vomiting and diarrhea has ceased for at least 24 hours. Bacterial causes of gastrointestinal illness require additional criteria to return to childcare and school.

Due to the prevalence and generally more severe symptoms of rotavirus, an oral rotavirus vaccine has been developed and is recommended for infants. This three-dose series which is recommended for 2, 4, and 6 month-old infants, has been shown to be more than 75% protective against the vaccine strain infection.

In summary, preventative measures have been shown to decrease the occurrence and spread of common viral illness in the child care and school environment. Thorough hand washing cannot be stressed enough in addition to excluding ill children until fever or gastrointestinal symptoms have resolved for at least 24 hours. In addition, vaccination with available immunizations may greatly reduce the exposure and spread of influenza and rotavirus in the childcare and school environment.



Car Seat Safety

Did you know that the Academy of Pediatrics now recommends that children remain rear-facing in a car seat until the age of 2? Although children who are 1 year of age AND weigh at least 20 pounds can ride forward-facing, it is still safest to keep these children rear-facing until the age of 2 if possible.

Did you know that most children between the ages of 4-8 years need booster seats? Below is a 5-step test:

1. Does your child sit all the way back against the auto seat?
2. Do your child's knees bend comfortably over the edge of the auto seat?
3. Does the lap belt fit snugly across the child's thighs?
4. Is the shoulder belt centered on the child's shoulder and chest?
5. Can the child stay seated like this for the whole trip?

If the answer is "no" to any of the above questions, your child should be in a booster seat to ride safely in a car. Children should ride in booster seats until adult seat belts fit correctly. This usually occurs when the child reaches about 4 ft 9 inches in height, generally between 8-12 years of age.

Pediatric Associates Announces

Basic Training: Kids and Teens Getting Fit

Starting in January 2010, Pediatric Associates will offer a new program for kids and teens who struggle with achieving and maintaining a healthy weight. *Basic Training* is a program that will help families and patients learn strategies for healthy eating and increased physical activity. The program, led by Dr. Chris Bolling, Nurse Practitioner Amber Cullen, and Physician Assistant Rachell Brooks, will use evidence-based techniques to improve nutrition and activity. The program will be designed especially for kids ages 5 to 19 years who are over the 95th percentile Body Mass Index for their age. There will be a focus on activities that are sustainable and affordable. Additionally, *Basic Training* will provide nutrition and activity suggestions tailored to the individual needs and resources of each family. Please ask us any time if you would like more information on this exciting new program.

Research Corner: Pediatric Associates Families Making a Difference

Pediatric Associates Research Group would like to thank all the patients and families who participated in the recent swine influenza (H1N1) vaccine study. Twenty-four patients ranging from ages 6 months to 9 years were enrolled in this extremely important nationwide study. Information gathered from this study has been invaluable to the development and usage of the H1N1 vaccine.

Please stay tuned for future studies at Pediatric Associates by checking in the office or on our website at www.pediatricweb.com (password pa001).

Health Care Questions

What if I need an after-hours appointment?

Pediatric Associates has always been committed to making same-day ill visits available to our patients when needed. If you feel your child needs to be seen on the day you are calling, please call as early as possible to schedule this appointment. During the busiest times of the year, we will occasionally make appointments available after hours if the schedule at all of- fices has filled for that day. To cover the additional expenses associated with these after- hours visits, an after-hours charge has been instituted. Pediatric Associates asks for your understanding in this matter.



What if I am in a car accident?

Car accidents always take people off guard. In a situation like this regardless if there is an indication of an in- jury or not many people want to have their children checked out by a health care provider. We understand this need and are available to treat an injury or verify that everything looks fine. The handling of the insurance in this case can get confusing. If a child is being seen due to a car accident, regardless if an injury occurred or not, *the bill for this must be sent to the car insurance*, not the health insurance. We are not set up to handle car insurance claims in our office. What this means to you is that you will need to pay for the visit when in with your child. We will provide you with the documentation needed to file this claim with your car insurance. With that in hand you can get reimbursed from your car insurance in the same way that they cover the cost to repair your car. This becomes even more important if there is an ongoing issue related to the accident. We want to be sure you do not get stuck with hospital bills that should be paid by the car insurance. Hopefully this is knowl- edge you will never need. However, if you do find yourself in this situation, this will be one less new thing to think about.

Presorted
Standard
US Postage
DATAMARK

Pediatric Associates, P.S.C.
2865 Chancellor Drive #225
Crestview Hills, Kentucky 41017
(859) 341-5400