

Monitoring Children's Health



A 2010 outbreak of E. coli infected 60% of children and staff at a Colorado child-care center. Health authorities insisted on a strict policy of excluding sick individuals, which reduced the spread of disease.

Public Health Reasons

Children who attend child-care centers are twice as likely to experience gastrointestinal illnesses as those who do not. This is presumably because they are more likely to be exposed to children who are sick than are those who are cared for in their own home.

Children are particularly vulnerable to the rapid spread of infectious diseases, including gastrointestinal illnesses, for several reasons. To begin with, very young children and infants (under 12 months old) have a natural curiosity that leads to handling objects and surfaces frequently and a tendency to put their hands and objects in their mouths. This natural behavior increases their exposure to potential sources of illness. Also, children's immune systems are still developing, and because they are smaller than adults, they often have more pronounced reactions to infections. Finally, children are more likely to suffer severe consequences from diseases that cause vomiting or diarrhea because they have smaller body fluid reserves than adults.

Transmission of pathogens can happen in a number of ways. Vomiting episodes produce droplets containing pathogens that may be aerosolized then inhaled and swallowed by others. The droplets produced from vomit as well as diarrhea can settle onto nearby surfaces, which can then infect people who come in contact with the contaminated surface. Also, children who have experienced diarrhea or vomiting may spread pathogens with their contaminated hands or clothing by coming in direct contact with other people. To avoid the spread of pathogens, it is important to exclude sick children from child-care centers.

When an illness occurs, an outbreak can be avoided if illness patterns are recognized promptly. Child-care workers who are familiar with the behavior and appearance of enrolled children can easily assess a child's health status both when the child arrives and periodically throughout the day. Doing a daily health check and keeping symptom records is a good way for child-care workers to monitor trends and watch for signs of an outbreak. When a potential problem arises, symptom records are necessary for the staff to determine what to do and, if necessary, obtain appropriate advice about how the facility must respond from a public health official or healthcare provider.

Practices

It is recommended that a log be kept of the children's health to track any emerging outbreaks. To do this, use a notebook and write the date at the top of the page. Then write down each child's name and her current health. This log is very useful in the case of an outbreak because the facility will be able to look back and see when the first cases began to emerge.

Daily Health Check

- Each day a trained staff member must conduct a health check of each child as soon as possible after the child enters the center and whenever a change in the child's behavior or appearance is noted while at the center.
- Instruct the staff member to document the following:
 - reported or observed illness or injury affecting the child or their family members since their previous day of attendance
 - reported or observed changes in behavior (lethargy or irritability) or appearance in the child since the previous day at the facility
 - any skin rashes, itchy skin or scalp, impetigo, or the presence of one or more living lice
 - signs of a fever, such as flushed appearance or shivering (temperature monitoring, in the absence of behavior change, is not recommended)
 - complaints of pain or not feeling well
 - vomiting or diarrhea
 - drainage from eye(s)
 - cuts/lacerations

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Authors and Acknowledgements

AUTHORS: Cortney Miller, MS, Angela Fraser, PhD, Roman Sturgis, MFA (editor), Xi Chen, MS, Anna Saunders. Department of Food, Nutrition, and Packaging Sciences, Clemson University, Clemson, SC 29634

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