

Health and Safety Information

A point of interest---

To: Infection Control Professionals, Health Officers, Local Health Department, and Health Care Providers

From: Christina Tan, MD, Deputy State Epidemiologist/Medical Director
Communicable Disease Service
Lisa McHugh, MPH, Epidemiologist, Infectious and Zoonotic Disease Program

Subject: Increase in Pediatric Rotavirus Cases and Admissions, January 2006-April 2006

The New Jersey Department of Health and Senior Services (NJDHSS), in collaboration with regional epidemiologists, is currently investigating an increase in pediatric rotavirus

What is it?

Rotavirus is the most common cause of severe diarrhea among children, resulting in the hospitalization of approximately 55,000 children each year in the United States and the deaths of over 600,000 children annually worldwide. The rate of rotavirus illness in New Jersey is not known since rotavirus is not a reportable disease.

The incubation period for rotavirus disease is approximately 2 days. The illness is characterized by vomiting and watery diarrhea for 3 - 8 days, and fever and abdominal pain occur frequently. Immunity after infection is incomplete, but repeat infections tend to be less severe than the original infection.

In the United States and other countries with temperate climates, the disease has a winter seasonal pattern, with annual epidemics occurring from November to April. The highest rates of illness occur among infants and young children, and most children in the United States are infected by 2 years of age. Adults can also be infected, though disease tends to be mild.

Transmission

The primary mode of transmission is fecal-oral, although low titers of virus in respiratory tract secretions and other body fluids have been reported. Because the virus is stable in the environment, transmission can occur through ingestion of contaminated water or food and contact with contaminated surfaces, which makes daycare facilities and schools particularly vulnerable to infection transmission. **Please Wash Hands Carefully**

Diagnosis and treatment

Diagnosis may be made by rapid antigen detection of rotavirus in stool specimens, but such testing is not commonly done.

For persons with healthy immune systems, rotavirus gastroenteritis is a self-limited illness, lasting for only a few days. Treatment is nonspecific and consists of oral rehydration (increase fluid intake) therapy to prevent dehydration. About one in 40 children with rotavirus gastroenteritis will require hospitalization for administration of intravenous fluids.

Recommendations for health care providers

NJDHSS recommends that health care providers be vigilant in diagnosing rotavirus cases. Health care providers should also be alert in identifying common source exposures of patients (e.g., daycares, schools). If these sources are identified, providers should notify their local health departments so that additional appropriate prevention measures can be implemented.

Additionally, health care providers should instruct parents of children with suspect rotavirus on how to keep children hydrated during their illness. An educational website on rehydration can be found on the CDC web site at: <http://www.cdc.gov/od/oc/parents/#prevent>

Additional information on rotavirus can be found at: <http://www.cdc.gov/ncidod/dvrd/revb/gastro/rotavirus.htm>

For more information please contact the nurses

The above information has received some editing by June Cuddihy, RN, CS, MSN