

Three Institutional Outbreaks of *Mycoplasma pneumoniae* Respiratory Infections

The CDC reported three outbreaks in institutional settings of acute respiratory illness (ARI) caused by *Mycoplasma pneumoniae* that occurred from June through November 1993. The outbreaks included 28 staff members and clients of a sheltered workshop for developmentally disabled adults in Ohio, 58 staff and patients in a tertiary care center in Texas, and 16 clients and employees in a residential developmental center in upstate New York. In these outbreaks, cases occurred during a three- to four-month period.

M pneumoniae is a common cause of acute upper and lower respiratory infection in children and adults. Infections occur sporadically throughout the year, and outbreaks are most common during the fall. Transmission of *M pneumoniae* infection probably occurs through close contact with contaminated respiratory droplets.

The outbreaks reported here indicate that epidemics spanning several months may occur in institutional settings where prolonged contact is common. The incubation period for this pathogen (16 to 32 days) may contribute to protracted duration of the epidemics and may limit the effectiveness of cohorting as a measure for controlling outbreaks.

FROM: Centers for Disease Control and Prevention. Outbreaks of *Mycoplasma pneumoniae* respiratory infection—Ohio, Texas, and New York, 1993. *MMWR* 1993;42:931,937-939.

Immune Globulin Found Effective in Preventing RSV Disease

Administration of high doses of respiratory syncytial virus (RSV) immune globulin was found to be effective in preventing lower respiratory tract infection in infants and young children at high risk for this disease.

Dr. Jessie Groothuis et al from five clinical centers reported a study involving 249 infants and young children with bronchopulmonary dysplasia due to congenital disease or prematurity alone. RSV immune globulin was given monthly in high dose (750 mg/kg, N=81) or low dose (150 mg/kg, N=79); 89

controls received no immune globulin. Group assignments were random, and assessments of respiratory illness and management were conducted without knowledge of group assignment.

There were 64 episodes of RSV infection: 19 in the high-dose group, 16 in the low-dose group, and 29 in the control group. In the high-dose group, there were fewer lower respiratory tract infections (7 versus 20 in the control group; $P=0.01$), fewer hospitalizations (6 versus 18 in the control group; $P=0.02$), and less use of ribavirin ($P=0.05$). In the low-dose group there was a significant reduction only in the number of days in the intensive care unit. Adverse events during the 580 infusions generally were mild.

The findings indicate that monthly infusions of high-dose immune globulin containing high titers of RSV-neutralizing antibody significantly decreased both the incidence and severity of RSV infection of the lower respiratory tract. The results of this study are clinically important, particularly because strategies of active immunization against RSV on very young seronegative children are proceeding slowly, and no vaccine for universal use will be available for some time. The authors conclude that passive immunization is currently the only safe and effective means of protecting high-risk infants and children against this serious disease.

In a related editorial, Dr. Kenneth McIntosh points out another implication of this work—a reduction in the need for aerosolized ribavirin, an effective yet toxic treatment that contaminates the environment. Reduced use will reduce exposure of healthcare workers during administration.

FROM: Groothuis JR, et al. Prophylactic administration of RSV-immune globulin to high-risk infants and young children. *N Engl J Med* 1993;329:1524-1530; McIntosh K. RSV-successful immunoprophylaxis at last. *N Engl J Med* 1993;329:1572-1573. Editorial.

Additional news items in this issue: *FDA Issues Regulations for Screening Tissues for Transplantation* (page 72), *DOT Extends Compliance Date Again for Medical Waste Regulations* (page 77), *HIV Transmission Reported in Household Setting* (page 87).
