

ABSTRACT

Seroprevalence of rubella in Jamaican women of childbearing age from January 1996 to December 1997 and its relationship with congenital rubella syndrome

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Rubella is an infectious disease that is worldwide in distribution. Significant rubella virus activity has been recorded in many Caribbean countries over the past five years and cases of congenital rubella have been documented as sequelae to these outbreaks. Congenital rubella syndrome is a class I notifiable disease in Jamaica and is associated with great morbidity and economic expense. This study was done to determine the immune status of women in childbearing age and identify congenital rubella syndrome cases.

This retrospective study was conducted in females aged 15-44 years in specific rural areas and the urban area in Jamaica, from January 1996 to 1997. Babies with congenital complications were selected on the basis of rubella IgM testing. The sampling frame was the laboratory bench records at the Virology Laboratory, University Hospital of the West Indies. Four hundred and twenty females were selected by a systematic sampling technique. Seroprevalence was determined by the rubella hemagglutination inhibition tests and congenital rubella

syndrome cases by rubella IgM antibody tests.

Overall, rubella seroprevalence was 68% and susceptibility was 32%. Susceptibility ranged in the parishes from 27% in St. Catherine to 40% in St. Elizabeth. Six congenital rubella syndrome cases were confirmed and the predominant clinical manifestations were cataracts, congenital heart disease and intrauterine growth retardation. A relationship was observed that linked CRS with the high susceptibility rates in females.

The findings indicate that we have not yet increased our rubella vaccination coverage among women of childbearing age. Children with congenital rubella syndrome will have disabilities such as mental retardation, deafness and visual impairment. To prevent rubella and CRS, screen all women of childbearing age and immunize these susceptible women with MMR vaccine.