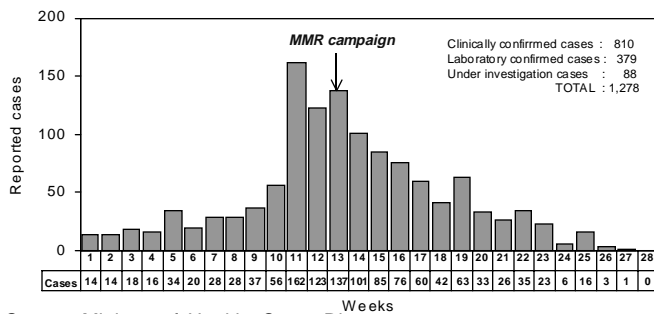


# Rubella Outbreak in Costa Rica

As of July 3, 1999 (epidemiological week 26), the provisional total of confirmed rubella cases reported in Costa Rica was 1,189. This total included 379 laboratory confirmed cases and 810 clinically confirmed cases. This is Costa Rica's first rubella outbreak since 1987, when 1,105 cases were reported.

The rubella outbreak reached its peak between weeks 10 and 14 (Figure 1). The age group primarily affected by the current outbreak was adults between the ages of 25 and 34 years. Of the cases in which age was known, 480 (44%) were reported from this age group alone. The groups aged 20-24 years 133 (12%) and 35-44 years 186 (17%) were also affected by the outbreak. Of the cases which occurred in children, 96 (9%) were aged <1-4 years, and 85 (8%) were aged 5-14 years. Overall, females made up a slightly greater percentage (56%) of reported cases.

**Figure 1**  
Number of rubella cases reported by week  
Costa Rica, 1999\*

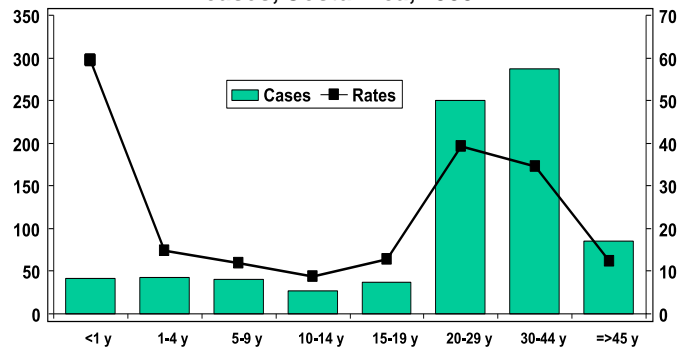


Source: Ministry of Health, Costa Rica  
\*Week #28 ending 17 July  
Note: 21 cases without weekly classification

The attack rates for children in the age groups of <1-4 years and 5-14 years were notably lower than for ages 15-50 (Figure 2). One explanation for this distribution is the introduction and continued presence of MMR vaccine. MMR vaccine was introduced into Costa Rica's immunization program in 1972. It is for this reason, that the group aged 25-34 years reported the highest attack rate. The age group 35-44 years reported a lower attack rate. This may be due to

their having been infected as children and consequently having developed a natural immunity against rubella. It is important to note that of all the age groups under the age of 50 years, the groups aged 5-9 years and 10-14 years reported the lowest attack rates. This is a result of improved coverage as well as proper vaccination through routine immunization and campaigns since the introduction of MMR vaccine.

**Figure 2**  
Case distribution and attack rate by age group of rubella cases, Costa Rica, 1999\*



Source: Ministry of Health, Costa Rica \* Data as of 3 July

As of 5 June, according to case distribution by region, Costa Rica's central area reported 83% of the country's total. 701 (51%) cases were from the Southern Central region and 385 (28%) cases were from the Northern Central region. Many cases were found among persons living in densely population areas, especially factory workers and market vendors.

In response to the outbreak, the country's Ministry of Health implemented a vaccination campaign using MMR vaccine between the end of March and the beginning of April (week 13). The selective campaign targeted adults, placing priority on women of childbearing age (15-44 years). As a result of the campaign, there has been a decline in the number of cases reported (Figure 1).

Source: Epidemiological Surveillance Unit, Ministry of Health Costa Rica

# Brazil's Response to the Polio Outbreak in Angola

Information of a large poliomyelitis outbreak in Angola, Africa was first reported by the international medical press at the end of April and beginning of May 1999. More than 882 cases of polio were reported, primarily in unvaccinated children (over 85%) and children under 5 years of age (over 90%). The Brazilian government assembled a team, to implement a series of steps that would avoid the risk of importation of wild poliovirus from Angola into Brazil. A team with representatives from the immunization and surveillance units of the Ministry of Health's National Health Foundation and a staff from the Pan American Health Organization's office in Brazil met to develop a national response to the Angolan outbreak.

The last laboratory confirmed case of indigenous poliomyelitis was reported in March, 1989 in the Northern State of Paraiba. The Brazilian polio eradication program took off in 1980, with two national immunization campaigns during which one dose of oral poliomyelitis vaccine (OPV) was administered to children under 5 years. To date, these annual campaigns continue to be maintained. National vaccination coverage has mostly been around 90% for children under 5 years of age (approximately 17 million) in the last 19 years.

## Preventive Measures

Due to low notification levels of acute flaccid paralysis (AFP) during the first six months of 1999, the team